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Educational News and Editorial Comment

THE NATIONAL EDUCATION ASSOCIATION

The recent meeting of the National Education Association was a success. Business was transacted with harmony and dispatch. There was unity of sentiment in favor of progressive efforts to secure better equipment for schools and better training for teachers. There was marked enthusiasm for those educational officers who have of late resisted courageously such political attacks as have been made on school systems in Pennsylvania and California. The association sponsored an initial meeting of the World Federation of Educational Associations which is described in a subsequent news item. A commission to study school reorganization was approved and created.

The new form of organization under which the Delegate Assembly transacts the business of the annual meeting may be said to be well established and functioning smoothly. It is by no means clear that the problems of central organization are equally well worked out. Sooner or later the association will have to recognize the fact that under existing conditions the small groups which are relatively permanent—the trustees, the Executive Committee, and the permanent secretarial staff—exercise a very powerful influence and are relatively inaccessible to direct influence from the Delegate Assembly. The officers elected from year to year are

so transient as compared with the groups mentioned that the influences which operate at elections are little studied by the ordinary members of the association, and the machinery of permanent organization is practically unknown to most members.

Either the elected officers should be selected with fuller consciousness of their place in the organization and should be given more power, or the association should frankly recognize some permanent executive as the real center of the association. As it is, a president is elected each year and called upon to perform the most arduous tasks without compensation other than honor and is limited in influence by the brevity of the presidential term.

Furthermore, the association is accepting certain "gentleman's agreements" which are not by any means of a type which the members of the association would favor if they were plainly exposed to view. For example, we are told quite confidently that the president for 1924-25 has been chosen by those in control. This is to be a man, under the agreement that every other year the president shall be a man. It apparently makes no difference whether the association needs a man next year or whether this particular man is wanted. It is agreed. The places of meeting too are being selected as in the old days when politics wrecked the association.

One must not be too critical of agreements, especially if enough people are let in on them. They are, however, extra-legal, and they are hazardous in a democracy. Why not bring them out into the open? Then there can be no repetition of the Salt Lake City performance, and there will be none of the uneasy feeling that now exists that the association is being "run."

Publicly known agreements, publicly arrived at, are perfectly proper. Private agreements made for a faction will destroy the organization and are clear evidences of short-sighted leadership. Perhaps the agreements which have been put over on the association up to this time are trivial. They are if the real center of equilibrium of the association is made firm and stable. They will be if the central influence of the association is exerted steadily and consistently in one direction—in the direction of the establishment of higher professional standards. They will be if petty personal politics and sectional politics are overtopped by broad statesman-like policies.

The association demands for its life leadership in professional lines. It demands broad policies in national matters. It will wane and diminish just to the degree to which its leaders are absorbed in making and executing extra-constitutional agreements.

WORLD FEDERATION OF EDUCATIONAL ASSOCIATIONS

There was organized in San Francisco at the time of the meeting of the National Education Association a new international association, the purpose of which is to bring into unified action all of the educational forces of the world. The new association adopted a constitution and elected officers. There were present at the organizing meeting about 150 bona fide delegates representing sixty countries. The United States was selected as the seat of headquarters for the time being.

The following is the constitution:

WHEREAS, Educational aims are universal, there should be devised some suitable and effective means to bring into closer co-ordination the various agencies which have to do with education throughout the world and to bring the 5,000,000 teachers into more fruitful and sympathetic relations with one another; therefore be it

Resolved, That this conference form a permanent federation of educational associations and that a temporary constitution be adopted as follows:

ARTICLE 1. NAME

SECTION 1. The name of this organization shall be the World Federation of Educational Associations.

ARTICLE 2. OBJECTS

SECTION 1. The objects of this federation shall be to secure international co-operation in educational enterprises, to foster the dissemination of information concerning education in all its forms among nations and peoples, to cultivate international good-will, and to promote the interests of peace throughout the world.

ARTICLE 3. MEMBERSHIP

SECTION 1. The following organizations shall be entitled to membership in this federation:

(a) Any nation-wide organization of educators which shall be recognized as such by the executive authority hereinafter mentioned.

(b) Any organization of educators in a country not at present possessing a nation-wide organization which shall make application for membership to the executive authority of this federation and whose application shall be approved by said executive authority.

ARTICLE 4. ORGANIZATION

SECTION 1. There shall be a board of directors comprising two members elected or appointed from and by each affiliating organization who shall hold office for two years. The board of directors shall be the executive authority controlling this federation. There shall be a temporary board of directors consisting of a temporary president, two temporary vice-presidents, and six other directors chosen as outlined in Section 6.

SEC. 2. There shall be a president chosen by the board of directors from their own body, but a temporary president shall be chosen by the delegates present at this world conference upon the recommendation of a nominating committee consisting of one delegate from each affiliating organization.

SEC. 3. There shall be a secretary-treasurer chosen by the board of directors, but a temporary secretary-treasurer shall be chosen by the delegates at this meeting in the same manner as the temporary president. The secretary-treasurer shall be the executive officer of the federation, under the direction of the board of directors, and he may be paid a salary at the discretion of the board.

ARTICLE 5. HEADQUARTERS

SECTION 1. The headquarters of this organization shall be temporarily located in the United States of America.

ARTICLE 6. MEETINGS

SECTION 1. A world conference shall meet in full session every alternate year, but a meeting of sections—one in Europe, one in America, and one in Asia and the rest of the world—shall be held in each intervening year.

ARTICLE 7. FEES

SECTION 1. Affiliating associations shall pay a subscription fee per annum of 1 cent per member (United States currency) provided that the fee of any affiliating association shall not be less than \$25 gold (United States currency), while the maximum contribution for any organization shall be \$1,000 gold (United States currency).

Certain projects were proposed and favored in resolutions adopted by the federation. A committee was appointed to report on the feasibility of establishing a world university. May 18 was set apart as Good-Will Day to be celebrated in the schools of all lands. Textbooks are to be reviewed with a view to making them better instruments of national understanding. A collection of books is to be made at some center where they can be examined by teachers. More training in civics and character-building is to be favored.

The officers of the new federation are as follows:

Augustus O. Thomas, United States, president; E. J. Sainbury, England, vice-president; P. W. Kuo, China, vice-president; C. H. Williams, University of Missouri, temporary secretary. Board of directors was elected as follows: Dr. M. Sawayanagi, president of the Imperial Education Association of Japan and a member of Parliament, and R. V. Gogate of India; George C. Pringle, president of the Educational Institute of Scotland, and Anagoras Karados, Greece; N. D. Showalter, president of the Washington State Normal School, Cheney, Washington, and Harry Charles Worth of Canada, executive secretary of the British Columbia Teachers Federation and former president of the Canadian Teachers Federation.

WISCONSIN'S PURE HISTORY LAW

During the recent past there has been much discussion throughout the country with regard to the purity of textbooks in American history. A number of the well-known texts in the field have been pronounced pro-British and un-American by groups of individuals here and there. In order to safeguard the children of the state from undesirable textbooks in history, the legislature of Wisconsin passed the following statute:

Chapter 21, Laws of 1923. An act to create 40.36 of the statutes, relating to textbooks used in the public schools.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. A new section is added to the statutes to be numbered to read: 40.36. (1) No history or other textbook shall be adopted for use or used in any district school, city school, vocational school, or high school which falsifies the facts regarding the war of independence, or the War of 1812, or which defames our nation's founders or misrepresents the ideals and causes for which they struggled and sacrificed or which contains propaganda favorable to any foreign government.

(2) Upon complaint of any five citizens filed with the state superintendent of public instruction that any history or other textbook which is being used in any district school, city school, vocational or high school contains any matter prohibited by subsection (1) of this section, the state superintendent shall fix a time for a public hearing upon such complaint, which shall not be more than thirty days from the date of filing said complaint, and shall be conducted either by the state superintendent or by the assistant state superintendent, or by one of the state inspectors of schools, to be designated by the state superintendent, and which hearing shall be held at the county seat of the county where the complainants reside. Notice of such hearing shall be given at least ten days prior to the date thereof through the public press and by registered mail to the complainants, the school board interested, and to the publishers of such textbook.

(3) Within ten days after such hearing the state superintendent shall make a finding upon such complaint. If he finds that any textbook contains matter prohibited in subsection (1) of this section, he shall make note of such findings in the list of textbooks which he is required by paragraph (b) of subsection (1) of section 40.35 annually to publish and to transmit to all county and city superintendents. No such textbooks shall thereafter be placed on the list of textbooks which may be adopted, sold, or exchanged in this state.

(4) Every school board, board of education, board of vocational education, or county board which has control over textbooks used in any district school, city school, vocational school, or high school, shall cause any textbook which the state superintendent has found contains prohibited matter in subsection (1) of this section to be withdrawn from use in such school prior to the opening of the school year following the publication of such finding of the state superintendent. No state aid under the provisions of sections 20.25, 20.26, 20.27, 20.28, 20.29, 20.33, and 20.335 of the statutes shall be paid for the support of any district school, city school, vocational school, or high school during any year in which any such textbook is used in the school after the finding of the state superintendent.

SEC. 2. This act shall take effect upon passage and publication.

The effects of this law will depend on how it is construed and executed. Executed justly and construed literally, it is harmless, but in the hands of one whose notions of American history are gained from the history textbooks of two generations ago, the law could do great harm. It makes possible a substitution of the prejudices of the uninformed for the judgment of carefully trained scholars.

When one considers the procedure which the statute provides for determining the purity of a textbook, one shudders to think how farcical the whole matter may become. A well-known historian describes the possible scene at the county courthouse as follows:

On the one side the five complaining citizens (the statute assumes them to be all of the same county), eager to protect their cherished offspring from the danger of learning any facts or thoughts unfamiliar to their parents, and armed with clippings from the Hearst newspapers and other authoritative texts. On the other side, the publisher's agent, reluctant to sacrifice the poor author, but willing to make "reasonable concessions" and nowise bigoted in matters of history. As judge, a school inspector, who very likely "had History I" when in college. What a method for establishing historical truth!

This same historian suggests that all who care for historical truth and know something of how it is ascertained and preserved

should regard it as a duty to attend these local inquisitions into history textbooks and to lift up their voices in behalf of common sense, rational patriotism, and fair-minded training of young Americans for citizenship in the United States.

So important is the question of who is to judge of appropriate matter for history courses that the Association of History Teachers of the Middle States and Maryland passed the following resolution in May, 1923.

WHEREAS, There has come to the attention of this association and its members the existence of considerable agitation in some newspapers and elsewhere on the subject of the teaching of American history in the schools which has tended to reflect on the patriotism and intelligence of the teachers of history;

WHEREAS, This agitation has in many cases been largely carried on by persons little conversant with the fundamental sources of American history, who have garbled the wording and intention of certain history textbooks so as to make them appear unpatriotic;

WHEREAS, This association feels that the object of the teaching of history is to give a truthful picture of the past with due regard to the age of the pupils for whom the work is intended; that the truth should not be distorted for any purpose whatsoever and that both sides of a controversial question should be adequately presented from an academic point of view so that students of history shall be trained in the habits of open-minded tolerance so as to prevent narrow-minded bigotry and prejudice; therefore be it

Resolved, That this association go on record as deplored an agitation based on either ignorance or malice, or which has for its object the promotion of animosities between classes or nations; that this association lend its influence to defeat the attempts made to get legislatures to write into the statutes the content of courses in history and the social sciences; that the proper place for determining such content is with the state and local educational authorities; and that we deplore the publicity that has been given this agitation as being both pernicious in its effect upon the training of our young American citizens and destructive of sound scholarship.

AMERICAN EDUCATION WEEK

The success of Education Week last year has led the American Legion, the National Education Association, and the United States Bureau of Education to unite once more in a call for a national discussion of school problems. The dates selected for this purpose are November 18 to 24. The program proposed is as follows:

FOR GOD AND COUNTRY

Sunday, November 18, 1923

1. Education in the home
2. Education in the school
3. Education in the church

Slogan—A Godly nation cannot fail.

Ministers of all denominations are urged to preach a sermon on education, either morning or evening. All communities are urged to hold mass meetings. Requests for speakers should be made to the American Legion Posts throughout the country for meetings during this week.

AMERICAN CONSTITUTION DAY

Monday, November 19, 1923

1. Life, liberty, and justice
2. How the Constitution guarantees these
3. Revolutionists and Radicals a menace to these guarantees
4. Security and opportunity

Slogans—Ballots not bullets. Visit the schools today.

PATRIOTISM DAY

Tuesday, November 20, 1923

1. The flag—the emblem of the nation
2. Help the immigrants and aliens to become Americans
3. Take an active interest in governmental affairs
4. Music influence upon a nation

Slogans—Visit the schools today. America first.

SCHOOL AND TEACHER DAY

Wednesday, November 21, 1923

1. The necessity of schools
2. The teacher as a nation builder
3. The school influence on the coming generation
4. School needs in the community
5. The school as a productive institution

Slogans—Visit the schools today. Better trained and better paid teachers, more adequate buildings.

ILLITERACY DAY

Thursday, November 22, 1923

1. Illiteracy—a menace to our nation
2. An American's duty toward the uneducated
3. Let every citizen teach one illiterate
4. No immigration until illiteracy among native and foreign-born is removed

Slogans—No illiteracy by 1927—it can be done. Visit the schools today.

COMMUNITY DAY

Friday, November 23, 1923

1. Equality of opportunity in education for every American boy and girl
2. Rural schools—city schools—colleges
3. A public library for every community
4. Children today—citizens tomorrow

Slogans—Visit the schools today. An equal chance for all children. A square deal for the country boy and girl.

PHYSICAL EDUCATION DAY

Saturday, November 24, 1923

1. Playgrounds
2. Physical education and hygiene
3. The great out-of-doors
4. The country's need in conservation and development of forests, soil, roads, and other resources

Slogans—A sick body makes a sick mind. Playgrounds in every community. Athletes all.

NEW JOURNALS

During the last few months two journals have appeared which are sure to be of interest to teachers. One is issued by the American Medical Association under the title *Hygeia*; the other, by the Faculty of the George Peabody College for Teachers under the title *Peabody Journal of Education*.

Hygeia is to contain in popularized form the results of modern medical research and experience. It is intended to promote general intelligence on matters of disease and health. It presents in its early issues a number of well illustrated pleas for preventive measures against the common causes of unsound physical conditions. For example, in an article by Samuel Hopkins Adams, entitled "Our Favorite Murderer," we find the following:

Some weeks ago, a boy wandering in a southern wood patch was bitten by a poisonous wild creature and died. The press associations disseminated the startling fact to all parts of the country, where it appeared in headlines as part of the sensational news of the day. In the same month and the same state twenty-odd persons, bitten by another variety of poisonous wild creature, died as a result of the bites. Except for local notice, the newspapers paid no attention to these deaths. The one victim about whom all the fuss was made was killed by a rattlesnake; the many were killed by mosquitoes. The first was a news event of magnitude because the rattlesnake has a hold on the popular imagination. The other tragedies passed practically unnoticed because we have become apathetically accustomed to the mosquito, which is, in bulk, thousands of times more harmful and dangerous than all the snakes and other wild crea-

tures in the United States put together. The potentially deadly pest is familiar and tiny, and therefore unimpressive. We continue to endure it supinely, almost fatalistically. If the venomous little buzzer had the unpleasant personal appearance, for example, of the tarantula (which probably never killed an able-bodied person in its history, despite its horrific repute), there would hardly be enough of the species left to provide the museums with specimens. As it is, we gladly suffer the mosquito; we welcome it into our houses through unprotected windows; we feed it on our blood; we transport it in our automobiles from places already infested to places hitherto free; and we provide suitable breeding places for it privately in our back-yards, at municipal expense through open drains, or even by special state or federal enterprise, in the form of unprotected irrigation water. It is not too much to say of the mosquito that it is our favorite murderer.

Hygeia is issued from 535 North Dearborn Street, Chicago, Illinois. It will be useful as a source of scientific materials for class work as well as a guide in matters of personal hygiene.

The *Peabody Journal of Education* is a bimonthly and from the appearance of the first issue promises to be representative of all that is most progressive in southern education. The introductory editorial describes the mission of the new journal thus:

Seriously—we think that there is room for an educational journal which, although national, understands and is particularly interested in the great awakened South. The educational South has lacked self-expression, and this partly at least because there has not been a suitable vehicle. But truth is not sectional; we shall welcome writers from everywhere and publish ideas, as we may be able, which will help school folk wherever they may be. We shall try to remember that not all worth-while research proceeds from the George Peabody College for Teachers. We shall seek to eschew hobbies. We think that educational ideas can be elucidated and promoted without being trade-marked and reduced to advertising catch-phrases. We shall aim to condense; we do not know whether a journal of education can exist without padding, but we propose to find out.

The *School Review* welcomes to the brotherhood of educational journalism these newcomers and extends to the editors best wishes for their unlimited success. Both are of the highest grade in mechanical make-up and content and can be recommended without reservation to all who are interested in superior educational material.

USEFUL LATIN

A few years ago the Philistine who dared to question the unrivaled importance of Latin in the curriculum of the secondary

schools of the United States was banished from academic society. If he ventured to ask what possible use Latin can serve as it is now taught, he was deluged with assurances that Latin needs no practical justification. The language in which Caesar issued orders to his cohorts, the language in which Cicero thundered against Catiline must not be made to answer before any modern court. It was, is, and shall be the true center of intellectual life for all generations of rising Americans.

Times and customs change. The number of inquiring Philistines increases with each passing year, and our day witnesses the impressive sight of Latin accepting subsidies of modern industrially acquired wealth to conduct, through the American Classical League, a loudly proclaimed scientific inquiry into its methods of work. Up to date the chief returns from the expenditures thus incurred seem to be increasing fears on the part of the members of the league that the subject which they are anxious to promote will not be able much longer to live on the fiction that it is a bearer of culture. Latin is anxious. Its proponents are beginning to ask the Philistine's question, What useful purpose can it serve?

Dean Andrew Fleming West, the leader of the cult, has a happy solution. Let us listen to his persuasive words setting forth the reasons why Latin must live, why it is to be preferred to Esperanto, Ido, and the rest. Surely from this time on Latin is safe. We shall read about Gaul and be able to discuss the League of Nations. We shall introduce high-school Juniors to the intricacies of Manilian methods of plunder, and they will become skilled representatives of the United States in foreign diplomatic posts. Latin will bring culture with one hand and with the other a price for its place in the sun. Above all, Latin will be taught to American young people even though it is pedagogically one of the most dismal of failures.

We quote from the *New York Times*:

"Undoubtedly there is a real need for an auxiliary language among the peoples of Europe and the Americas to supplement French and English in diplomatic and commercial circles," Dean West said today. "A simplified Latin seems to be the most adaptable for such a purpose."

Dean West paid especial tribute to the study of this subject made by Professor Roland G. Kent of the University of Pennsylvania, the results of which have been published by the American Classical League.

"The presence of so many languages in the different portions of the world is an obstacle to international understanding," continues Dean West. "This obstacle can be lessened or overcome by the acceptance of some one language to be learned by all men who learn a second foreign language in addition to their mother tongue.

"Apart from the statesman and the traveler, the scholar, the professional man, and the business man need a means of international communication, easy and generally usable. The object in this advocacy, however, is not an international language but an international auxiliary language, qualified with the word 'auxiliary' because it is not intended to displace any existing language. It is meant to supplement rather than displace any existing means of international communication such as French in diplomacy and English in commerce, except so far as may come about by natural selection in due course of time. It is only intended as an auxiliary, but an auxiliary capable of use in all countries and by all men who wish to exchange ideas.

"There are but three classes of languages from which such an international auxiliary language could be chosen: a modern language, which is the vernacular of some nation or people, such as English, French, Spanish, or German; an artificial language, or a language no longer used as a vernacular, such as Latin.

"Latin as the least objectionable solution is arrived at by a series of eliminations based on the comparison of the advantages and disadvantages of those languages from which the I. A. L., as it has been named by the league, could possibly be chosen.

"English is withdrawn from the field of nominees for the new post because of its inconsistencies between the written and spoken word and because of existing national rivalries and the apprehension that the world-wide use of English would give the English speaking nations an undue advantage in foreign trade.

"The case against French is less complete. Jealousies, however, and the wide variance between its orthography and pronunciation are held as barriers against French becoming the I. A. L.

"The chief handicaps to the adoption of Spanish, according to the American Classical League, are that it employs too many idiomatic expressions and that comparatively few persons outside of Spanish-speaking lands have cared to learn the language.

"German is barred on account of the difficult sounds and by the enmities left behind by the war, and Esperanto, Ido, and other artificial languages are not considered very seriously because the sounds are ill-chosen and because an artificial language has no storehouse of association in a literature built up by long years of extensive usage."

In advocating a simplified Latin as the most suitable available language for adoption as an auxiliary international language, Dean West said: "A simplified Latin meets the main requirements which naturally would be expected of a desirable international auxiliary."

THE READJUSTMENT OF OUR FUNDAMENTAL SCHOOLS

HENRY CLINTON MORRISON
University of Chicago

As a people, we do not think in terms of education; we think in terms of schools. We have no educational system; we have an elementary school, a high school, and a college.

Since the twentieth century came in, a social revolution has changed the whole aspect of our institutional problem. This revolution has been a change in the attitude of society toward the educational process, which has brought about an unprecedented increase in the enrolment, particularly in the higher schools. By about the year 1900, there began to appear on the statute books, in considerable numbers, effective compulsory-education laws and soon afterward effective acts prohibiting the employment of children in the industries. Few people realize the forces which were being set in action. Not only were millions of children sent to school, but there was generated in their parents a change of heart which was infinitely more significant. Earlier generations had in large measure counted their children as invested capital, the monetary returns on which would be enjoyed in the interval between the arrival of the working age and legal majority. In the bitter anti-child-labor fights of the early years of the century, the exploiting parent was far more an obstacle than the exploiting corporation. His children once in school, however, with the prospect of remaining there until fourteen years of age, or probably sixteen, the whole horizon of the parent shifted. He came to see the free education of his children as a part of his American franchise which he had previously overlooked. Education up to sixteen usually means the high school, and the high school implies the university. The advocates of educational democracy had succeeded beyond their imaginings and had created for themselves problems which even in their own lifetime they must meet.

In the census year 1920, 69 per cent of the population in the age groups five to twenty-one was in school somewhere. Twenty-eight per cent of the adolescent population was in high school, and the undergraduate colleges had begun to be overwhelmed with Freshmen. It is not at all uncommon to find high schools in single communities which enrol well above 50 per cent of their total possible membership. And yet the increasing enrolment is only the symptom. The significant underlying fact is the change in the attitude of society toward childhood and progress which the enrolment implies.

Our traditional organization, with its neighborhood elementary school, its city high school, and its geographically remote college, cannot effectively carry the load. It was not designed to do so. Each of the fundamental schools was developed to meet the need of a present generation and not the aspirations of a later and very different society. So long as the student load took the form of a pyramid, with a broad base in the elementary school and abruptly sloping sides, with a process of powerful natural selection at work, the two higher institutions could function acceptably well. But the pyramid has been truncated and is showing manifest signs of changing its form in the direction of the prism. Natural selection has largely ceased to operate.

Of the numerous maladjustments which might be cited, I confine myself to two which seem to me to be fundamental.

The attempt to educate en masse substantially all comers has led the secondary and collegiate institutions to organize themselves on the model of American industrialism. That no education viewed as a regenerating and transforming process applied to a highly complex organism could ever successfully be carried out in that way goes without saying. But we had to do something. Hence the whole theory of standardized courses, on the perfect analogy of standardized processes in industry. Hence, too, the whole system of accrediting in Carnegie units, semester hours, majors and minors, until the humor of the situation has become irresistible. The youth who comes gravely forward and presents as indubitable currency of the realm his units and semester hours in exchange for certification of intellectual and social status has simply been

made kindred to Tom Sawyer and his tickets of many colors at Sunday school.

The normal result of the process, in addition to its mischievous effects on the student's understanding of the nature of his own culture, is a serious aggravation of the problem of the student load. When we standardize higher education in terms of time to be spent instead of in terms of intellectual achievements to be accomplished, we set up an increasing inflexibility in a process which is by nature most flexible. The University of Chicago as an institution has always been the first to resist such tendencies, and it has as a matter of history contributed through the quarter system the only substantial corrective. But the root of the evil remains. The mechanism of accrediting which is in use fixes arbitrarily the date of intellectual maturity instead of allowing it to seek its own level. If that date is a year beyond what the actual requirements of the process are, the load is needlessly increased by the whole student body of the last year. If the artificial prolongation is two years, then the load is increased by the student population of the last two years, and so on. No one knows what the normal time requirement expressed in terms of actual cultural achievement really is. A very considerable amount of experimentation has been done in the lower schools, with almost uniform disclosures to the effect that the time allowances arbitrarily set up in the past have been unnecessarily long. Interesting, and apparently significant, findings in the educational laboratory of the University of Chicago seem to suggest that the period assumed to be necessary for the process of general education may be at least two years longer than is actually needed, the intellectual requirements of the Bachelor's degree being what they are.

And so we come to the second of our present critical issues, the financial support of education. It is popularly supposed that but a pittance of our national public expenditure is so applied. Such is not the case. Of an aggregate federal, state, and municipal expenditure of approximately \$8,000,000,000, about \$1,500,000,000 is going to the support of schools, exclusive of correctional and custodial institutions. If we exclude the federal fisc, about one-third of the total public revenue goes to the support of education. The figures are ridiculously underestimated since they do not in-

clude any real capital costs, for true capital accounts are almost never kept and provided for. Such in brief is the tale for tax-supported education.

A much more reliable basis for thinking is to be found in a consideration of the proportion of the aggregate income of the people available for our purposes. Income in the United States fluctuates, but we shall not go very far wrong if we keep in mind \$60,000,000,-000. Out of that must be paid the maintenance cost of society, at an economical standard of living, necessary capital investment, depreciation, and depletion. The margin within which needed social work such as education can be carried on is relatively small. Out of this margin must be paid the cost not only of tax-supported but of endowed institutions as well. The two differ only in their titles to a portion of the social income. The title of one is an act of the legislature. The title of the other is a commercial claim. More than that, the institutional cost of education is only a part of the total cost. To the institutional cost must be added the support of the student body in so far as the latter is for the time being economically unproductive. Evidently the increase in enrolment in the most costly stages of schooling cannot go on indefinitely. Fundamental adjustments must be made.

Apparently, the only possible condition under which education as the basis of civilization in the modern state can go on indefinitely is the creation by educational institutions of net increases in the balance of the social income available for the higher life, at least equal to: first, that portion of the social income annually appropriated for educational costs; and, second, that draft on the social income created by the effect of general education on the common standard of living.

In the end, the fundamental adjustment can be accomplished only through the graduate school, in its discovery of new truth and through its successful dissemination of truth. The obligation touches the graduate school in every department because every department has access to human life in its higher economic relations.

The assertion which I have just made may at first seem unwarranted. What relation to economic well-being can graduate study in the humanities, for instance, possibly have? May I elaborate?

The relationship of the physical and biological sciences to the production and conservation of consumable goods and services is obvious. Indeed, it would not be difficult to show that these sciences have so far outstripped the social sciences and the liberal arts that a serious maladjustment has resulted.

The relationship of economic investigation to our underlying problem is also clear, but it has lagged far behind similar activities in the physical and biological sciences. Society cannot advantageously utilize the intellectual product of the latter unless economic intelligence is at least equally clear and well diffused.

In the modern world, the well-being of society depends fundamentally on the systematic diffusion of truth and the generation of intelligence through educational institutions. The maintenance of effective schools and instrumentalities rests at bottom on the scientific study of the educative process and the higher professional training of teachers, enterprises of the university graduate school.

So far, the relationship is clear. These graduate activities deal mainly with the positive aspects of production and control. The political and moral sciences, history, arts and letters have a potential relationship to the economic problem, negative in character, to be sure, but essential.

The late Walter Rathenau estimated that on the whole one-third of the income of society is lost in waste and riotous living. His estimate is in striking accord with that of our own Treasury Department for the year 1919, of \$22,000,000,000 for luxuries out of an aggregate popular income of \$66,000,000,000.

A considerable percentage of the waste originates in political mismanagement, which is in itself traceable to widespread political ignorance. Time and again schoolmasters have attempted to introduce thorough training in political science in our schools and every time have been estopped by lack of material, lack of qualified teachers, and lack of expert guidance. The graduate school is not producing material nor equipping teachers in quantity sufficient for the purpose. This statement is made in full appreciation of the renewed and very promising activity which political scientists have in recent years inaugurated.

The great bulk of the waste, however, originates in low standards of personal satisfaction and in a consequent morality which is sheer paganism. The untutored savage achieves his highest delight in gross personal pleasures and in a display which keeps him in perpetual poverty. On a somewhat higher plane, the savage has his analogue in the individual whom material progress has raised to affluence without equipping him with the tastes which lead to rational enjoyment. The savage squanders his all and wastes the patrimony of the next generation in a single feast. The inheritor of his culture squanders billions annually on superfluous automobiles, loads his women with the spoils of a province, and gets his only form of approximate intellectual satisfaction from the weekly devastation of many square miles of woodland. It is useless merely to deplore the evils of the day and worse than useless to attempt to regulate them by taxation or other forms of legal control. In the end, our billions of luxurious waste will be saved only by generating in the masses a culture which seeks more rational enjoyment and which eventuates in a better sense of values. That seems to me exactly as vital an economic and social problem for the liberal arts as was identification and control of the germ of yellow fever an economic and social problem for the student of biological science. The problem can be solved, first, by equipping teachers for the secondary school with the actual culture which they are intended to impart and, second, by developing and training students of distinction for the production of genuinely cultural material for popular reading.

Like other organisms, society tends to adjust itself to new lines of pressure. Such an adjustment seems to be going on in the reorganization of our institutions as such to meet the pressure set up by the new popular attitude toward education. That the appropriate adjustment will take place apart from the creative human intelligence is, of course, highly improbable. On the other hand, it is exceedingly unlikely that any workable adjustment can be invented by an individual or an association of individuals apart from correct interpretation of the social forces at work. It is my purpose to attempt to exhibit the lines along which our institutional adjustment is taking place and, if possible, to suggest some interpre-

tation of the process. May I ask you to recall our fundamental institutions and the state in which they grew up?

The original American schools which achieved some degree of permanence were the college, which was in the main an importation and calculated to serve a vocational purpose, and a later district school, which, if not wholly indigenous, was at least singularly well adapted to the social and political notions of the people among whom it grew up.

Early in the second half of the nineteenth century, there became established a new type of school for the education of the masses. This was the graded elementary school, with which we are all familiar. Like the early college, it was an importation, but from a different source. It had been organized to meet the needs of a foreign society and a political system which had no analogue on this continent. It had no outlook into higher institutions, and it consistently ignored the individual. It was thus fundamentally foreign to the whole genius of our own social and political institutions. One can well believe that its true character would have been seen from the beginning had not its organization appealed to a people who were already infatuated with the factory system in industry. It lent itself primarily to the regimenting of great masses of pupils. The attacks of students of education who realized the mechanical character and sterility of its educational conceptions had little effect beyond the earliest grades. Out of this school probably grew our current popular habit of viewing education as a matter of time to be spent and a corresponding certificate to be obtained. The city dwellers of the last two generations have in general been schooled that way, and naturally the prevailing view is that that is what education means. The earlier district school, whatever its shortcomings, had no such views. You went to the district school until your family decided that you had exhausted its possibilities. This period might come early, and it might come late, but in the end your objective was a comprehensible intellectual objective and not a time-to-be-spent objective.

And we had one other indigenous school—the rural academy of the early days and its legitimate successor, the free high school. Like the district school, this institution grew up to meet a specific

American need, namely, the higher education of the ambitious middle classes. In its inception it paralleled the college, though it seldom rose to the intellectual dignity of the college. The public high school was its successor, but the high school did not become established until the graded school was becoming dominant and the force of circumstances drove the two into an uncongenial partnership. The Illinois statute book still bears witness to the principle that there is no partnership between the two except where local political pressure has enforced it. In the larger cities of Illinois and in the nation at large, the two schools have been amalgamated into an incongruous machine which it is extremely difficult to lubricate.

It has never been possible to stratify American society nor to impose a caste system. On account of this national characteristic, the unfortunate high school toward the end of the nineteenth century found itself caught between the intellectual complacency of its local partner and the unfeeling exclusiveness of the remote college. In brief, it had to take children and get them ready for college. It had to abandon in large measure its original purpose and take pattern after the first of the American middle schools, the Boston Latin School. Of course, it rapidly became as mechanical as the rest of the system. In the end, any youth who can show 8 grades, plus 15 Carnegie units, plus 36 majors or 120 semester hours is entitled to the Bachelor's degree. All institutional legislation is based on revision in the weight and standard of fineness of the currency.

The result has been a series of overlapping institutions, expensive to maintain, wasteful in intellectual output, and sadly deficient in cultural output.

As soon as the city school system had become accustomed to a single professional administration of both graded school and high school, the friction between the two became increasingly apparent. As soon as the present era of large numbers in the higher institutions became fairly launched, the frequency with which new and expensive high-school buildings were required helped the public to see things as the superintendent of schools saw them. The result was the rapid evolution of the junior high school, so-called, another middle

school which appropriated the last two years from the graded school and the first year of the traditional high school. Properly conceived, the junior high school made possible administrative economies. The educator tried to adapt this school to the mental and instinctive equipment of early adolescence, but with limited success.

Meantime, another parallel process had been going on. I refer to the so-called departmentalization of the upper years of the graded school. In essence, this movement represented an attempt to carry into the elementary school the instructional methods of the high school, without necessarily modifying the curriculum of the graded school. It seems to have been a significant part of the process of adjustment, to all intents and purposes in harmony with the junior high school movement, although distinct from the latter.

The permanent contribution of the junior high school movement has been the disclosure that children can utilize the intellectual materials of higher education at an age level two and sometimes three years earlier than the graded school had been willing to admit. There is no positive evidence as yet that we have carried the rationalizing processes of the high school back to an age so immature that they cannot advantageously be utilized.

So far as we have gone, then, the story is apparently one of the realignment of the two earlier standardized schools of the early twentieth century. The tendency is evidently to construct a secondary school which is quite different from the standardized four-year, sixteen-unit school of the preceding period. Let us now look to the later corresponding period, that in which the relationship of high school and college is involved.

Here again has been a story of friction and waste, clearly recognized for thirty years. An earlier institution—the college—with its own well-developed traditions and methods attempts to get part of its work done in an institution which started life with purposes wholly different from those of the college and which is still obliged to adhere in large part to its earlier intentions. The well-recognized result has been that the college has had to devote approximately two years to the completion of a stage in education, essentially to bring the student to a point at which he has the

necessary intellectual background for higher study and has learned to work with some degree of independence.

May we turn aside from our main inquiry for the moment to consider the financial implications?

The burden of huge numbers still at secondary levels, concentrated in relatively few localities, is bound to absorb more and more of the resources which should be available for true university work and in that way to strike at the root of the whole economic structure of education. I have tried to show that the possibility of carrying on education at any and all levels rests in the end on scholarship and professional training and scientific production which are best known at the university levels. It is, to be sure, sometimes claimed that the early levels of college work pay their own instructional costs. By dint of using inferior instructional units, that is perhaps sometimes true. With good teaching, however, instructional costs are seldom very much more than 50 per cent of the full actual cost. Students have to be housed, and every college takes pride in its buildings. In the actual cost of education, for every million invested in recitation halls, residence buildings, libraries, private fraternity buildings, and so on, there is involved an actual annual cost of approximately \$20,000 for depreciation and obsolescence, plus the cost of maintenance and upkeep. These costs do not all appear as items on the college books, but they must appear in our actual social accounting, for they do affect very materially the amount available for other essential purposes.

We have, then, another distinct line of pressure, and along this line readjustment appears to be going on in a normal fashion. It takes the form, as I think, of the local junior college, an outgrowth of the last ten years. These institutions typically represent the first two college years, adapted to the level of the high school or other secondary institution. In some cases they appear in the place of four-year colleges which have given up their last two years and are concentrating on the first two. I am indebted to Professor Koos of the University of Minnesota for the figures which I quote.

Junior colleges of some sort are to be found in 37 of the 48 states; 35 junior colleges in city and high school districts enrolled last year 5,014 students; state institutions enrolled 3,276; and private institutions, 7,682. If complete data were at hand, we should have a total enrolment exceeding 16,000.

The graduates do not, of course, all find their way into the senior college, but many of them do. On the whole, such students appear to be as well qualified for senior-college and graduate work as students originating in four-year colleges or within the same institution in which their continuation records are made. Figures compiled in the Recorder's office show that 202 graduates of typical local junior colleges had a continuation record at the University of Chicago showing an average standing of 2.9 grade points. One hundred seventy-three students transferring from typical Illinois four-year colleges had a continuation record of 2.6 grade points. A sampling of 100 students originating in our own junior college had a senior-college average for credited majors of 2.9 grade points.

Viewed from the standpoint of support, teaching costs per capita in the local junior college will probably not vary greatly from equivalent costs in the present four-year college. The overhead and capital costs, however, will in the long run be very materially less on a comparable basis. In the ordinary local high-school situation, students at the junior-college level are absorbed into the organization with very little absolute increase in overhead, and, while in the long run building space must be provided for them, the building cost is not proportionately increased where such students are distributed over hundreds and perhaps eventually thousands of local schools instead of being concentrated in a few colleges of the four-year residence type. Moreover, the capital investment in residence buildings and the maintenance cost thereon are eliminated. To this extent, then, we can see some prospect of giving higher education to the increasing student load.

Viewing, then, the readjustment of the graded school, the high school, and the college which is going on, apparently in response to economic and social pressure, we are in a position to interpret the situation as a phase in the development of our fundamental schools.

The three institutions, distinct in origin, distinct in purpose, and distinct in life, are coalescing, and there will probably emerge from the process two institutions normally and naturally adjusted to the needs of childhood and youth and to the intellectual and

cultural processes needed by our society—a brief primary school and a prolonged secondary school. In the end, the result should be to free the university from a purely educational task which today absorbs the larger part of its energies and to transform the best of our higher institutions into real universities, institutions for educated, mature manhood and womanhood, possessed of ripened and definite cultural purposes.

Along with this process of institutional realignment has gone in recent years another process tending to reconstruct, not the institutional organization, but rather the teaching process. The tendency to which I refer is manifested in such movements as the attempt to train pupils how to study; project teaching; direct teaching of languages; the testing of educational products; and, perhaps most significant of all, the recently aroused interest in teaching at the college level, exemplified, on the one hand, by a considerable number of such courses as the Contemporary Civilization course at Columbia and, on the other, by definite plans for the study of the teaching process inaugurated by the Association of American University Professors.

This process, taken in connection with the process of institutional adjustment, seems quite clearly to be a process of substituting for mechanical units of education, expressed only in terms of time to be spent and courses to be passed, an evaluation in terms of actual intellectual and cultural development achieved.

May we turn, then, to a consideration of the desirable purpose which must be achieved below the level of the true university.

We may view general education, apart from special and vocational training, as the process to which the youth must be subjected before, on the one hand, he can become a thoroughly intelligent and self-reliant citizen and a contented and rational member of society and before, on the other hand, he can become qualified to take up the pursuit of those higher studies which require consciousness of intellectual purpose and ability to study apart from the constant tutorial presence of the teacher. If we conceive this to be a fair statement of the purpose of the general education of youth, it becomes clear that the youth who is actually prepared to take a large place in society as an intelligent citizen and productive

unit is in no essential sense different from the youth who is at the same stage prepared to take up further study. The essence of the matter in both cases is intellectual independence, capacity to think for one's self, capacity to use the ordinary intellectual capital of society for purposes of independent study. Reflection will make clear, I am sure, how reliable the test is as applied to political action, to the interpretation of all kinds of social situations, and to the understanding of the commercial or industrial organization. And the test is no less reasonable if we apply it to fitness for independent and creative study. I dare say that most university professors would agree with me in the assertion that one of the commonest, if not indeed the most common, defect in the student who comes to us for graduate study is to be found in the principle that he has indulged in premature specialization, has yielded prematurely to a vocational purpose—in a word, is so handicapped by lack of cultural breadth and real capacity for independent study that his graduate career inevitably fails of its best possibilities and above all of its supreme possibility, the generation of creative power.

Such are, in the broadest aspects, the demands of real general education if we resolutely separate purely educational objectives from the demands of social distinction with which they have become involved. I think we can go farther and describe in very general terms the process which such training involves and the achievements which it implies. In the broadest sense, I take it, it includes the following real achievements, each of them being an actual development in the individual himself.

1. A rational comprehension of the environment in which civilized man finds himself, including, of course, his spiritual and literary and artistic inheritance.

2. Contact with other cultures than his own through command of their languages.

3. A sense and appreciation of the common culture and spiritual capital of the race.

4. Clarity and coherence of mind which best reveals itself in command of the use of language.

5. A body of intellectual and cultural interests which form the foundation of intellectual and cultural self-government and which

are manifested chiefly by personal satisfaction secured through wide reading and through the pursuit of the fine arts.

6. Ability to use the methods of thinking which the civilized man employs. I have no intention of setting up here a return to a disciplinary conception of education. I simply mean that every individual who is effectively adapted to the world in which he lives has to be able to think in the terms which the physical scientist uses, in those which the biologist uses, in those which the economist and the mathematician use, and in terms of the cultural values which are and have been the common possession of men able to seek their satisfaction in the most rational form.

7. Intellectual responsibility and independence. That is to say, a capacity to use the ordinary intellectual capital of society for the purpose of study independently of the constant guidance and constraint of the teacher or of the system. This, of course, is the supreme product and the final test of the effectiveness of general education. Most American universities are still devoting a large proportion of their energies to this training. In so far as this is true, they are consistently performing the tasks of the secondary school. In so far as the university is obliged to occupy itself with compelling students to study, it is still dealing with a part of the educative process which is not essentially different from that part which is manipulated by the fourth grade. There can be no real university in America except so far as there is developed a student body which has arrived at the stage of intellectual self-government and intellectual responsibility prior to university matriculation.

This is, of course, only to restate what has been stated time and time again. The difference is in this: we have now arrived at the point in our professional evolution at which we can formulate a curriculum for general education in terms of these real intellectual objectives and proceed to the task of systematically developing them and systematically testing to see if we have them, instead of merely laying out a series of grades and courses in terms of time to be spent and then resting on the hope that the products which we have always desired will somehow come out of the process.

That kind of curriculum is flexible. It can be administered with due regard to the needs of individuals, and in the end it is

intellectually honest because it leads the student to interpret his culture in terms of realities which he knows he has or has not, instead of in terms of symbolic measures which have no discernible relation to reality. It makes possible the coherence of the whole intellectual life of the student. For instance, it makes possible the utilization of the content subjects for the purpose of training in ability to write the English language. Such a curriculum makes it more readily possible to stimulate individual initiative and individual responsibility and to discover and develop intellectual interests.

The process implies breadth at the level of general education instead of a pretense of depth. The community is periodically shocked by revelations of incredible ignorance on the part of students well along the educational pathway. If you will follow the literature dealing with that sort of thing, you will observe that these lamentable ignorances occur in spots. This student is as innocent as a child of all rational knowledge of the history of his own country but is competent in chemistry; another is an entirely acceptable companion for a conversation about current literature but is marvelously ignorant of the simplest principles of physics or taxation; still another has excellent standing in mathematics but lumps together socialism, anarchy, communism, psychoanalysis, birth control, and the labor-union movement as things with which no honest man has any concern. The situation, without any doubt at all, has its roots in the premature application of the elective system, coupled with a curriculum of general education which is so inflexible that no individual can secure contact with more than a few of the narrowest kinds of segments of the world in which he lives. The elective scheme in principle, and as President Eliot first enunciated it, has much in it with which the professional educator has to be in entire sympathy, but, like the eight-grade school, it early became simply an administrative device for getting around an uncomfortable situation.

Education, if it means anything at all, means putting the individual in intelligent contact with and control of his environment. Apart from vocational pursuits, which are another story entirely, the environment is, on the whole, the fixed term and not the individ-

ual. The fact that a girl does not like chemistry will not in itself enable her to place an intelligent interpretation on certain of her later household duties, but the fact does admonish us to adapt chemistry to the girl's comprehension and uses instead of attempting to adapt the girl to chemistry in the abstract. The fact that a boy does not like economics will not in itself enable him to take the intelligent and ethical position on the question of taxation which every educated person ought to be able to take. Given curriculum space, with a rational curriculum properly unified and properly taught, the principle of electivism below the true university level will probably come to be applied chiefly at the point at which the student's career leads him out of the course of general education into the field of specific training for his vocational life.

Apart from the standard fifteen units, plus 120 semester hours, the ogre which stands at the doorway of the university is the maturity question. It is intensely real, and it is critical of the student's capacity to function at various of the turning-points in his educational career. It is unfortunate that it exists at all because the charge of immaturity is such a temptation to us teachers to justify our own professional shortcomings. After all, what is maturity? Certain kinds we can very readily identify and measure. We can, for instance, speak with a great deal of precision of the symptoms and stigmata which attach themselves to the various stages of physical maturing. We have of late come to speak with considerable confidence of the stages of mental maturity, but neither of these has any specific and inflexible relation to intellectual maturity. Again, if we think of social maturity as that point at which the youth can safely be trusted away from home, we find it hard to identify any particular relation between social maturity and physical maturity or chronological age. The whole subject is one which would amply repay a great deal of investigation, but we can make certain assertions with a considerable degree of confidence. We can say, for instance, that intellectual maturity is that point at which the student is capable of formulating his own program of studies and capable of pursuing the same with a reasonable degree of independence. If he can do this at fifteen, he is intellectually mature, even though his voice may still be in the midst

of its adolescent changes. If he has not reached this point at forty, he is not intellectually mature, even though he be the father of an ample family. Similarly, if we can accept the definition of social maturity which I have given as having a certain reality, we can say with some confidence that some children are socially mature at ten. I have personally known more than one such, and all of us, I am sure, have known individuals who have these many years exercised the full franchise of an American citizen without having reached any commendable degree of social maturity. Apparently, physical and mental maturity are purely biological questions, while intellectual maturity and social maturity are, within broad limits, largely questions of experience, and of experience which is within the control of the educator. If we care to go back to the period before the days of the graded school and the dominance of the factory system, one can find a fair sample of the possibilities of intellectual maturity in the story of Agassiz' boys in their late teens as recorded in the autobiography of Shaler. One can find abundant evidence of early social maturity in the youthful sea captains of the maritime history of Massachusetts. Physical maturity was not different then from what it is now.

In thinking about the new secondary school, the school of youth, the school of general education, we shall be pretty sure to reflect that a great many instances of vocational training necessarily come within the age limits with which this school has to do. Others will be deferred, as they now are, to graduate level, only the clear prospect is that the graduate level may be at least two years earlier than is now the case. Practically all vocational training to which the educative process is applicable will tend to be deferred, as the years go on, to a later and later period. It is no part of my purpose to attempt an analysis of the relation of vocational enterprises to the general educative process. Suffice it to suggest that, in the more systematic social accounting which must ultimately be developed, vocational training will have to be made a specific charge on the industry or profession affected instead of on the sources from which the revenues of general education are derived. This proposition, it seems to me, is independent of the conveniences of administering vocational training or the manner of its political

control. It is vastly important that the principle of general education within the reach of all men should be conceived as the central fundamental social consideration, rather than the numerous specialized types of training which grow out of it and which society may from time to time require.

There are few remaining physical obstacles to the communication of ideas. The newspaper can lay before the millions of our people, not once but several times each day, the happenings of all the continents. No man need longer be without his book or, if he will, many books. Sixteen millions of people in the United States alone heed daily the dramatic art—such as it is. The living voice and the crash of great symphonies can be heard the globe around. But the newspaper, the moving-picture, the wireless telephone, are powerless to give the people what the people do not want, what they cannot understand or appreciate. Journalism has attempted it, and the high-grade journalist keeps up the battle, but none knows better than he what a hopeless struggle it is. In the end, what the masses want is the measure of modern civilization. To make the oncoming generations desire better and better things is the obligation of the school and the school alone. The supreme task of the men and women of learning in this generation can be nothing else than to erect and equip an educational system which society can support and which will carry to all men the reality and the healing strength and the satisfaction of intellectual and cultural and spiritual self-knowledge and self-government.

SOME FACTORS GOVERNING ENROLMENT IN THE HIGHER STATE INSTITUTIONS OF TEXAS¹

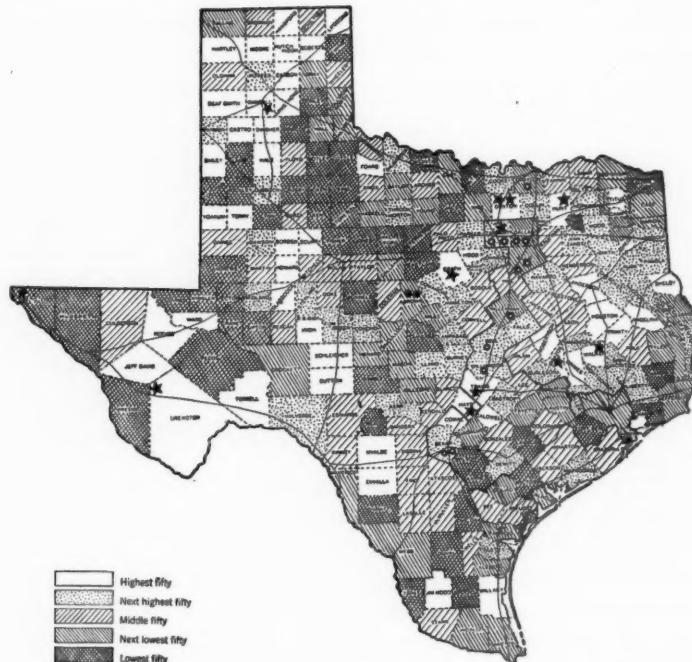
B. F. PITTINGER
University of Texas

Twenty-seven of the 253 counties in Texas yielded 50 per cent of the twelve thousand students who were enrolled in the school year 1922-23 in the state institutions of higher learning. Seventy-four of the 253 counties yielded 75 per cent of the student body. Two important causes of this concentration of students are found in the concentration of population and wealth. The twenty-seven counties which yielded 50 per cent of the student body contain about 38 per cent of the population and about 37 per cent of the wealth of the entire state. The seventy-four counties which yielded 75 per cent of the students contain 68 per cent of the people and 64 per cent of the assessed wealth. Population and wealth are thus evident factors, but they do not explain the situation entirely.

More compelling proof of the inadequacy of these factors appears when one studies the situation county by county. Ten counties in Texas had no students at all enrolled in the higher state institutions; eighteen other counties had less than one student for every thousand white inhabitants; seven had more than ten, and two had more than twenty-five. The middle 50 per cent of the 253 counties, when ranked in order from the highest to the lowest according to the number of students enrolled for every thousand white inhabitants, ranged from slightly less than four to less than two. Similarly, aside from the ten counties which had no students at all in any of the higher state institutions, the amount of assessed wealth behind each student ranged from \$3,800 in one county to \$6,203,000 in another. Twenty-five counties in the state had less than \$10,000 behind each student in the higher state

¹ This paper is adapted from a committee report prepared by the writer in collaboration with Professors A. C. Ellis and C. G. Haines.

institutions, while thirty counties had more than \$1,000,000 behind every such student. When all of the counties in Texas were ranked in order from the highest to the lowest according to the amount of assessed wealth per student in higher state institutions, the middle 50 per cent ranged from \$582,000 to \$220,000.



The stars represent state institutions of higher learning; the circles represent independent colleges; the lighter continuous lines represent the principal railroads; and the heavy black line incloses the counties containing foreign-born whites.

MAP I.—Proportion of students in state institutions of higher learning in Texas

To a considerable degree, then, the distribution of students in the higher state institutions among the counties of Texas conforms to the distribution of wealth and population. But to perhaps even a greater degree it does not. Other factors must be operating to bring about the extreme concentration of students that has been

noted. This paper seeks to determine, at least in part, these other factors.

In order to ascertain these other factors, it is first necessary to find the proportionate number of students sent to the higher state institutions by the individual counties. Furthermore, in recognition of the differences in population in the various counties, it is necessary to state this proportion in terms of some population unit. Finally, because the state institutions are attended, practically speaking, by white students only, it is legitimate to eliminate from consideration all other elements of the population. Accordingly, there has been ascertained for each individual county the number of students from that county who attended higher state institutions per thousand white inhabitants, negroes and persons of Mexican birth being excluded.

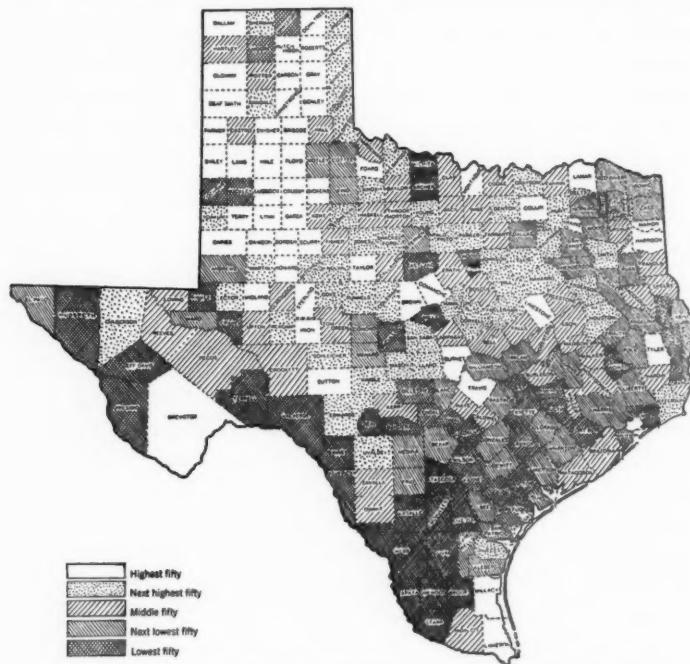
The results of this part of the study are presented graphically in Map 1. In preparing this map, the 253 counties in the state were first ranked in order from the highest to the lowest according to the number of students per thousand white inhabitants sent from each county to the various higher state institutions. The entire series was then divided into quintiles or groups of approximately fifty counties each. Each of these groups is represented on the map. The dark areas indicate the counties which sent a relatively small part of their white population to the higher state institutions. The lighter areas, on the other hand, indicate the counties which sent relatively large numbers of students to these institutions. The ranges of the quintile groups, in terms of the number of students per thousand white inhabitants, are as follows:

Highest fifty.....	4.01-27.19
Next highest fifty.....	2.93-3.84
Middle fifty	2.41-2.92
Next lowest fifty.....	1.57-2.40
Lowest fifty.....	0.00-1.55

From this map it appears that there are about five groups of counties which sent a relatively small part of their population to the higher state institutions. One of these groups is located along the western boundary. Another is in the north central part of the state, and a third is in the south central part of the state.

The fourth and fifth groups are found in the northeast and southeast corners. On the other hand, the counties which sent relatively large numbers of students to the state institutions are widely distributed.

One interesting problem, in the search for the conditions which influence enrolment in higher state institutions in Texas, concerns



MAP 2.—Proportion of students attending high schools in Texas

the relation between the number of students from each county who attended institutions of higher learning and the number of students in each county enrolled in local high schools. In other words, to what extent is county high-school enrolment correlated with county representation at the state institutions of higher learning? With this problem in mind, Map 2 was prepared to show the number of students per thousand white inhabitants

enrolled in the high schools of each county. In the preparation of this map exactly the same procedure was followed as in the preparation of Map 1. The same system of dots and lines has also been employed to represent the different quintiles. The dark areas, therefore, indicate the counties which enrolled a relatively small part of their white population in the high school, while the lighter areas indicate those which had relatively large high-school enrolments. The ranges of these quintiles, in terms of the number of high-school students per thousand white inhabitants, are as follows:

Highest fifty.....	55.48-89.76
Next highest fifty.....	45.35-55.13
Middle fifty.....	37.56-45.14
Next lowest fifty.....	27.91-37.53
Lowest fifty.....	0.00-27.66

A comparison of these maps reveals some rather startling differences. The dark areas in the west and the north are much less conspicuous in Map 2 than in Map 1. The counties with low high-school enrolment, as compared with total white population, are largely concentrated in the eastern and southern portions of the state. The main tendencies may be summarized by saying that eastern and southern Texas ranks relatively low in high-school enrolment and relatively high in its patronage of higher state institutions, while northern and western Texas ranks high in high-school enrolment and low in enrolment in higher state institutions. While there is some direct relation in local areas between high-school enrolment and enrolment in higher state institutions, in general the relation seems to be inverse.

Other possible factors in the situation regarding attendance at the higher state institutions are shown graphically in Map 1. For instance, the approximate locations of the different state institutions of higher learning are shown. These institutions include the main university in Travis County, the medical college in Galveston County, the School of Mines in El Paso County, the Agricultural and Mechanical College in Brazos County, its two branches in Tarrant and Erath counties, the College of Industrial Arts (for women) in Denton County, and the six state normal colleges now in operation in Randall, Brewster, Denton, Hunt, Walker, and

Hays counties. Study of this map at once reveals that the counties containing these different institutions rank in the main among the highest fifty with respect to enrolment in higher state institutions and that immediately adjoining counties are, for the most part, in the highest or the "next highest" quintiles. A striking exception to this rule is El Paso County in which is located the School of Mines. Probably the restricted appeal of this highly specialized school accounts for this exceptional case. Twenty-two of the fifty highest counties and twenty-one of the fifty next highest counties contain, or are adjacent to counties which contain, higher state institutions. It thus seems clear that one large factor in determining the residences of students in the higher state institutions is the proximity of these institutions. A study, not reported here, of the distribution by counties of the enrolment in each of these state institutions, unmistakably confirms this inference.

Map 1 also shows, in the form of circles, the approximate location of the private and denominational colleges in the state. Eight of the fourteen colleges are located in the next lowest quintile of counties ranked according to enrolment in higher state institutions. The other six, however, are found in the next highest quintile. The location of these colleges, therefore, does not explain to any considerable degree the peculiarities of attendance at higher state institutions.

The lighter continuous lines shown in Map 1 represent what are probably the principal railroads of Texas. Certainly these are the roads which lead most directly to the different higher state institutions. These railroads are seen to traverse, with remarkable consistency, the lighter areas of the map and, when combined with the matter of the location of the higher state institutions, seem to account for most of these areas.

There is, however, a scattered group of dark counties to the south and east of Dallas County, on Map 1, which are closely contiguous to both the higher state institutions and the railroads. How shall we account for the relatively small enrolment from these counties? The answer is possibly as follows:¹ An irregular heavy black line

¹ The data used at this point are taken from an unpublished study by E. E. Davis, of the Bureau of Extension of the University of Texas.

incloses on the map an L-shaped group of counties running southward from Dallas to Karnes and thence eastward to Harris and Galveston. Within this area are concentrated almost all of the foreign-born whites of the state, especially the Austrians, Germans, and Czecho-Slovakians. People intimately acquainted with conditions in these counties believe that the presence of this foreign-born element is at least partly responsible for the apparent deficiency in educational interest.

To summarize, high-school enrolment and the location of the independent colleges do not seem to be important factors in determining the distribution of attendants on higher state institutions among the counties of Texas. Wealth and size of population are, of course, important factors. The character of the population seems also to exercise an influence. But possibly more important than any of these are institutional proximity and directness of railroad communication. To bring the people of Texas more evenly to the higher state institutions, then, would seem to involve bringing these institutions more closely to the people, by wise multiplication and distribution, with constant attention to population, wealth, and ease of transportation.

THE REORGANIZATION OF THE SEVENTH, EIGHTH, AND NINTH GRADES—PROGRAM OF STUDIES

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The final report of the Committee on the Reorganization of the Seventh, Eighth, and Ninth Grades, of the National Council of Education, is appropriately closed by a report of the subcommittee on the junior high school program of studies. In all sections of the country the conviction is spreading that the outstanding characteristic of a real junior high school is a reorganized program of studies which shall be a composite of elementary and secondary courses, which shall articulate elementary and secondary education, and which shall "help the pupil to explore his own aptitudes and to make at least provisional choice of the kinds of work to which he will devote himself."¹ This report, however, cannot be submitted as a final report on the junior high school program of studies but only as the second annual report of a subcommittee which fully recognizes that, while its own official existence may cease, neither it nor any other committee can submit a final report on an educational problem so distinctly evolutionary in nature as the junior high school program of studies.

Steadily the impression has grown upon this subcommittee that variation in curriculum practices in the junior high school renders a report representative of generally accepted practice both impossible and undesirable. Experimentation in the administration of the curriculum is today characteristic of practically all junior high schools organized for a period of two or more years. Widespread experimentation inevitably leads to variation in practice equally as widespread. Variation leads to unavoidable temporary confusion, differences of opinion, and all of the helpful discussion from which,

¹ *Cardinal Principles of Secondary Education*, p. 18. Bureau of Education Bulletin No. 35, 1918.

in every educational movement, come progress and achievement. The committee is of the opinion that no definite check should be placed on experimentation but that the prevailing curriculum practices should be studied, with the objective, at a later date, to summarize these practices and to formulate a plan of curriculum-making with the background of experimentation and of the survey of typical curriculum administration.

The present situation in the widespread experimentation with junior high school courses of study is dynamic; it has already been productive of much progress and is prophetic of greater progress yet to come. I am confident that I reflect the judgment of all junior high school men and women actively participating in the movement when I say that the situation must continue as plastic as it is today. Experimentation must not cease; differences of opinion and discussion in the selection of materials and methodology must continue unhindered; tentative must remain as the characteristic modifier of each junior high school course of study; and the process of evolution must continue until both participants and critics of the reorganization of the program of studies recognize and acclaim the present period of evolutionary experimentation as the single most healthful symptom of the junior high school movement. We must curb our impatience and await the slower and surer gains which will come from lapse of time, deliberate judgment, and scientific experimentation.

A generation of educational experimentation is time brief enough for the achievement of the far-reaching objectives which confront the transitional unit of the public schools. Briefer time might suffice were the objectives of the junior high school confined to its own sphere as a distinct and isolated unit of organization. But the strategic position of the junior high school as the intermediate school of transition involves a reaction on the elementary school and the senior high school which is now demanding, and will increasingly demand, readjustments in the entire public school system.

The isolation of administrative units, particularly the elementary-school and the high-school units, was the chief indictment of systems of schools preceding the 6-3-3 plan. The primary objective of the junior high school, as the unit of transition, is articulation.

Until the junior high school ceases to be regarded exclusively as an isolated unit of organization and of educational experimentation, there cannot be that unanimity of mutual understanding which alone can bring the united efforts of elementary and secondary schools into focus for a concerted solution, not merely of junior high school problems, but of the greater problems of an articulated public-school system.

What is chiefly needed today is recognition on the part of school administrators, supervisory officers, elementary-school faculties, junior high school faculties, and senior high school faculties, of their common obligation to participate in the solution of the curriculum problems of the transitional school, because of its strategic relation to the whole system of schools and its inevitable reaction on curriculum practices in the schools adjoining it as its inlet and its outlet.

The continued evolution of the junior high school program of studies must soon close the chapter under the caption "The Reorganization of the Seventh, Eighth, and Ninth Grades" and open another far more important chapter under the caption "The Co-ordination of the 6-3-3 Plan of School Administration." Emphasis must ultimately be shifted from curriculum reorganization on horizontal or isolated levels of the public school system, viz., the elementary school, the junior high school, and the senior high school, to the vertical or continuous administration of the curriculum. In this shift of emphasis will come to all three administrative units a common purpose, greater than any single unit can assume, to co-ordinate courses of study throughout the elementary and secondary fields.

It is entirely appropriate that the junior high school as the unit of transition should recognize this need and propose to the elementary school and to the senior high school a concerted effort to articulate courses of study with vertical or continuous development in each subject of instruction. The junior high school recognizes, after a decade of curriculum experimentation in its horizontal or isolated level of administration, that its own courses of study in English, mathematics, social studies, natural science, fine and practical arts, school health, guidance, and secondary-school electives are inadequate to the degree that they have failed to secure articu-

lation and continuity with the elementary-school course of study or with the senior high school course of study or with both.

The first stage of an isolated reorganization of curriculum practice in the intermediate or transitional unit must inevitably lead to a second stage infinitely more important, viz., the co-ordinated reorganization of each course of study throughout the whole range of the school system. Curriculum-revision committees of two types are needed—first, elementary-school committees, junior high school committees, and senior high school committees; second, a joint committee of representatives of all three units to co-ordinate the curriculum revisions of the three separate committees. Again, let me repeat that it is entirely appropriate that the recognition of the need for joint or co-operative organization for curriculum-making should be urged by the intermediate school of transition.

The faculties of most junior high schools have been recruited from the elementary field. This carrying over of training and experience has assured a high degree of co-ordination between the elementary school and the junior high school. The opportunities, however, for contact and for common experience between the junior high school and the senior high school have not been so natural or spontaneous. And, yet, the junior high school is a component part, not of the elementary field, but of the secondary field. It was, therefore, foreordained that the two three-year units of the secondary school should, by the very nature of their being, be brought into closer co-ordination. To the everlasting credit of the senior high school, whose field the junior high school entered either invited or uninvited, let it be said that the challenge to prove the right to such admission is giving place to a hopeful attitude of welcome and co-operation. Also let it be said that the challenge of the senior high school to the junior high school to prove its right to a place in the secondary field has been productive of a hearty acceptance of the challenge by the junior high school—an incentive which has not been without value in the demonstration of its right to that place.

The present attitude of the senior high school to offer and to accept opportunities for co-operation is prophetic of the long-needed articulation of the junior high school and the senior high school. Out of the present approach of these two secondary-school units

to closer contacts, to better mutual understanding, and to definite co-operation in co-ordinating courses of study, there will come a further stage of evolutionary experimentation in curriculum revision, by both the junior high school and the senior high school, which will eliminate the horizontal and isolated levels of curriculum administration and which will introduce the continuous type of courses of study, alone consistent with or worthy of the component nature of the two secondary-school units.

The junior high school does not enter the public-school system as the competitor of either the elementary school or the senior high school. Rather, it is the complement of both. It offers to each the relief for which, though unconsciously yet none the less actually, it has been seeking. Neither alone has been able, by reason of its position at the extreme end of the school system, to articulate elementary and secondary education.

We in the junior high school field do not come as competitors. We come with a purpose which all must share with us—to articulate elementary and secondary education and to create a co-ordinated, continuous, unbroken school system of twelve years. Such a purpose cannot long remain the exclusive prerogative of the transitional unit in the 6-3-3 organization. The purpose must be shared by all, or the most vital educational opportunity which our generation has known will be lost through lack of helpful co-operation. The achievement of the objective will be to the credit of each unit in the 6-3-3 plan, and the failure to achieve sane co-operation must similarly be charged to the discredit of all three.

The eight-year elementary school has been confronted with all of the problems that are inevitable in a confusion of interests between the elementary years in Grades I-VI and the initial secondary or early adolescent years in Grades VII and VIII. The eight-year elementary school has been burdened with an almost impracticable task—to render equal justice to childhood and early adolescents with the same school organization, administration, and program of studies. The junior high school offers to assume its chief problem, *viz.*, the leakage in Grades VII and VIII.

Furthermore, when the elementary school is relieved of the burden of the seventh and eighth grades, it is able to concentrate on

problems of courses of study and teaching methods in Grades I-VI to a degree never before possible in the 8-4 organization. This concentration, with singleness of purpose, on a restricted sphere of activity culminates in a position of acknowledged leadership among other elementary schools still carrying the double burden of Grades I-VI and Grades VII and VIII. The professional satisfaction which accompanies increased efficiency in the elementary field of Grades I-VI is usually an unexpected but none the less real compensation for the surrender of the seventh and eighth grades.

At the same time the junior high school must also undertake for the high school of the 8-4 organization what has always been its chief problem, *viz.*, the mortality of the ninth year, due chiefly to the lack of a transitional period of preparation, exploration, and guidance from elementary education to secondary education.

Each unit of the 6-3-3 organization must be free to enter upon a constructive program of creating a school environment in correspondence with the distinctive instincts and tendencies of the age with which it deals. Concentration of effort on a restricted sphere of activity must be accompanied by increased efficiency, particularly when the restricted sphere has its own peculiar characteristics which make it distinctive.

The junior high school is the initial stage of the secondary school. It undertakes, through its exploratory tryout courses and its guidance program, to determine the educational or vocational placement of each child. The senior high school, relieved of its present problems of guiding ninth-grade pupils to right educational choices adapted to all of the individual differences of aptitude, capacity, and interest, can give exclusive attention to the intensive specialized training which electives involve.

At the same time the senior high school is free to concentrate on the responsibility which it shares with the other units to complete the social integration of all pupils, however differentiated in their individual educational and vocational objectives. The senior high school program of studies is increasingly developing a body of social-science materials, English and literature, mathematics, science, and fine and practical arts, which are the common need of all of the differentiated groups. The senior high school, if free to concentrate on

intensive specialized courses and a core curriculum of constants, will consummate the socially integrating influences of the elementary school which are now continued in a modified form in the junior high school program of studies and administration.

By force of urgent necessity, the junior high school has been confronted with problems of organization and administration which have too frequently absorbed exclusive attention or delayed progress in curriculum reorganization. The demands of a new type of school plant and fixed equipment would tolerate no postponement. The administrative problems of the classification of pupils in ability groups, the use and interpretation of intelligence tests, subject-promotion with all of its problems of remedial and preventive measures for retardation, home-room organization, organized school activities, adoption of guidance plans, differentiation of electives, and the development of a technique of administrative records—all of these problems and many kindred needs demanded immediate solution and smooth operation, and in the early years of the junior high school movement partially prevented concentration on the more vital need of a reorganized program of studies.

More recently, however, greater freedom has come to concentrate on the revision of the courses of study. Never before has there been such general concerted experimentation in the readjustment of curriculum administration as has marked the period since the National Council of Education three years ago appointed the Committee on the Reorganization of the Seventh, Eighth, and Ninth Grades. Organizations for curriculum-making are common today in all progressive systems administered on the 6-3-3 basis.

The final report of the subcommittee is, therefore, largely devoted to a request for definite curriculum-making organizations in all systems where the junior high school is established. Further, the committee urges that efforts be made to consolidate the studies of elementary-school committees, junior high school committees, and senior high school committees to the end of promoting continuous vertical types of articulated programs of study. These recommendations are offered in the conviction that, when carried into effect, they will greatly facilitate the mission of the junior high school, first, to weld together the public-school system and, second,

to guide intelligently adolescent pupils who, during the junior high school period, must find their way by means of a closely co-ordinated program of studies from the single curriculum of the elementary school to the multiple curriculums of the senior high school.

Thus far the discussion has been restricted to the present need of co-operation on the part of the three units of the school system in articulating all courses of study. We wish also to direct your attention to the already extensive development within the junior high school itself of a reorganized program of studies.

The junior high school inherited its program of studies in part from the elementary school and in part from the high school; a third source was the industrial and commercial fields and the home; a fourth contribution, which the junior high school together with the senior high school deliberately sought, was received from the rapidly expanding field of social-science materials and social and civic activities to the end of socializing the content and method of all courses of study and of giving to adolescents "a self-conscious social adjustment."

These inheritances came chiefly as isolated and unassimilated units of instruction. From the elementary school came the common branches—English composition, technical language, reading, literature, spelling, penmanship, arithmetic, geography, history, music, drawing, physical education, some manual training and home economics, some social science or civics, and some nature study. From the senior high school came the constants in English, mathematics, and social studies, and the extensive array of secondary-school electives—Latin, French, Spanish, and the intermittent German, algebra, geometry, biology or general science, ancient history and European history, commercial courses in bookkeeping, typewriting, commercial mathematics, and business practice, the general shop or practical arts courses, the general home economics courses, and the vocational types of both the last two.

The introduction of such a formidable array of isolated units of instruction into the junior high school program of studies led to a great variety of courses which many non-constructive critics of the junior high school have advanced as the chief objection to the junior high school on the ground, perfectly defensible at the beginning of

the movement, that it involved a scattering snap-shot exposure of pupils to a hodgepodge program of studies. Serious reflection on the development of the junior high school's administration of its curriculum will convince any fair-minded student of the movement that the introduction of these varied and unassimilated units of instruction was not only unavoidable but even desirable in order that there might be created in the minds of administrators, supervising agencies, and junior high school participants a clear consciousness of the magnitude of the problem of articulating elementary and secondary courses of study.

From the inception of the junior high school, efforts have been continuous to consolidate unassimilated subjects of instruction into larger and more comprehensive subject groups. Gradually, practice has developed a few comprehensive units of study within which the unassimilated subjects inherited from the elementary school and the high school have been articulated, e.g., English and languages, mathematics, social studies, natural science, fine and practical arts, school health, and one option among a group of electives in the latter half of the junior high school. Electives have been differentiated as the initial choices within the academic, the commercial, the technical, the vocational, and the fine-arts curriculums. The questionnaire submitted by the subcommittee last year revealed a large preponderating vote in favor of six one-clock-hour periods; four of these periods are distributed to the major branches which persist as constants through the junior high school, viz., English, social studies, mathematics, and science; one period is devoted to fine and practical arts; and the sixth period is given to school health; organized school activities and guidance become part-period work. The reduction of the time allotment to the constants provides for the introduction of electives in the latter half of the junior high school period.

It is significant to note that the four major constants and fine and practical arts, school activities, school health, and guidance are becoming in many junior high schools continuous throughout the entire junior high school period. This is a modification of former practice, which gives much hope that the ninth grade is becoming more closely articulated with the seventh and eighth grades or

that the practice of looking upon the ninth grade as the first year of the high school is being discontinued in favor of a greater purpose to make it an integral and co-ordinated part of the junior high school itself. The principle of continuity of courses of study throughout the three-year period must eventually eliminate previous distinctions of demarcation between the seventh and eighth grades and the ninth grade.

The very nearness of the junior high school to its own movement prevents a clear conception of its progress toward more comprehensive or general courses of study which have gradually replaced the assorted units of instruction which were bequeathed to it a decade ago. Elementary and secondary courses of study have been and will continue in the process of articulation; through this process the transitional unit of the public-school system, by reason of its freedom from educational tradition, has been able to undertake, through effective co-ordination, the elimination of gaps between elementary and secondary education.

Witness the evolution of social studies or social science in the junior high school program of studies—an articulation of elementary-school history, geography, and elementary civics with secondary-school ancient history, European and modern history, community civics, vocational civics, and economic civics. The junior high school lays no claim to the solution of this problem, but it does maintain that, by initiating the consolidation of these unassimilated units, it has taken a vital step toward effective articulation of elementary and secondary courses in the social-science field.

Witness again the evolution of a course in general mathematics which is articulating elementary-school arithmetic with secondary-school algebra, geometry, and numerical trigonometry. Again, the experiment of general or composite mathematics must extend over a period of years to evolve its own content and method. The significant fact, however, is in the effort to articulate elementary and secondary courses of study for the sake wholly of adolescents who must make the shift from one to the other and who can make the transfer more readily through the articulation of elementary arithmetic with secondary mathematics than through the former abrupt transition from exclusive arithmetic to exclusive algebra.

Witness also the development of a general course in science which is articulating the nature-study of the elementary school with the biology, physics, chemistry, and physiography of the senior high school. No brief decade of experimentation can adequately solve the problem of the articulation of nature-study with the cross-sectioned courses in science in the high school. But the significant fact in this instance is that an articulated general course in science, vitalized throughout by constant contact with the life and environmental experiences of early adolescent youth, is the only course in science which can be given to pupils too immature for the pure science studies of the senior high school. It will be a contribution of incalculable value to this modern age of scientific life and achievement if the junior high school succeeds in establishing science as one of the required constants in the program of studies in secondary education.

Witness also the evolution of vocational or trade-training courses of industrial education into the present widespread general shop course in home mechanics and the equally significant development of general home economics as a constant for all girls through the three years of the junior high school. The fact that 85 per cent of these girls are destined to become home-makers is ample justification for this development.

Witness the co-ordination of Latin and modern languages with English. The solution of this co-ordination will receive a stimulus, which it much needs today, when the investigation of the Classical League is completed.

Witness the introduction of junior business training as a required subject in the junior high school program of studies to survey the field of commercial education, to help pupils to discover aptitudes for commercial training, and to reveal to them the wide range both of commercial education and of its rapidly expanding vocational opportunities. Junior business training or any similar introductory commercial course assures to all pupils a knowledge of the principles and practices prevailing in the commercial world—a knowledge which should be an educational heritage of every adolescent youth.

Witness the continuation of music and art as required constants in the junior high school program of studies. The purpose of the

elementary school to make the aesthetic and cultural values of music and art the common right of all pupils has been accepted by the junior high school, which in turn is discovering for many pupils the vocational values of the fine arts. Time alone can reveal the readjustment in the senior high school program of studies which will be undertaken when the present required and elective courses in music and art in the junior high school have become more firmly established. The vertical or continuous supervision of music and art through the school system which prevails in most cities will accelerate the extension of music and art as required and elective courses in both secondary schools, probably far beyond the extension of such courses today, significant as the present fine arts courses are in comparison with the almost total absence of such courses a few years ago.

G. Stanley Hall makes the profound assertion that the all-conditioning control of the adolescent age is motor control which, being interpreted, means for both secondary schools health education, hygiene, physical training, and school-health supervision. There has long been a need of articulating the school-health program of the elementary school for all pupils with the athletic program of the secondary school too frequently restricted to the few in least need of physical training. The school-health programs of both the junior high school and the senior high school are being formulated today on principles which receive the sanction of the medical profession and which, by reason of the far-sighted vision of many superintendents, are receiving the direction of specialists in school health. The rapid evolution of health and hygiene education, as well as physical and athletic training, is evidenced by the adoption of a greater time allotment for school health in many junior high schools, varying from a minimum of two-clock-hour periods a week to four and five periods a week.

The isolated and unassimilated units of instruction which the junior high school inherited are being articulated into more comprehensive subject groups designated as English, general social science, general mathematics, general science, general home economics, general shop, school health, and other better articulated courses of study. The marvel is, not that more has not been accomplished,

but that so much has been achieved to fulfil the primary mission of the junior high school in the public school system, viz., the welding together of its three units by the articulation of elementary and secondary education. Any educational agency or institution which can within a decade reveal a development from unassimilated to co-ordinated courses of study may be permitted to ignore non-constructive critics and assume the prerogative of inviting the constructive and co-operative aid of the elementary school and the senior high school in the further extension of co-ordination.

The committee submits the following guiding principles for the revision of courses of study: Each junior high school course of study should (1) proceed by natural, transitional, and progressive stages to the articulation of elementary and secondary education; (2) develop from "simpler aspects"¹ characterizing the junior high school toward "refinements"² characterizing the senior high school; (3) provide a survey of the subject field for the discovery of individual aptitudes and for the revelation of educational and vocational opportunities; (4) deal with the life, environmental experiences, and the immediate needs of early adolescent pupils that "school may be life, not merely preparation for life";³ (5) conserve the interests of those who drop out and of those who continue by unit organization in each year of its development to the end that each year of work may be of definite value to those who go no farther; and (6) assure an apperceptive basis for later cross-sections of the general courses of study when specialization in subdivisions of each subject field is undertaken in the senior high school and higher institutions.

SUMMARY

Summarizing, the junior high school program of studies should continue, with modifications, the single curriculum of the elementary school. Through its general courses of study, it should expand the single curriculum into an enriched and varied curriculum. The resultant should, in a gradually increasing degree, become the initial

¹ *Cardinal Principles of Secondary Education*, p. 17. Bureau of Education Bulletin No. 35, 1918.

² *Ibid.*

³ John Dewey, *The School and Society*, chap. ii. Chicago: University of Chicago Press, 1915.

stage of all secondary-school curriculums. It should become the source of an apperceptive basis for later senior high school courses; it should "reveal higher types of activities, make these both desired and to an extent possible."¹ It should offer assurance of intelligent educational choice and wise educational placement. It should make possible a tentative or provisional choice of electives. It should increase the probability that pupils will persist through the initial stages of secondary-school courses in the junior high school and thus also increase the probability that they will continue these courses and complete the specialized curriculums of the senior high school.

The enacting clause in the educational reorganization inherent in the junior high school is a new reorganized program of studies, continuous with the programs of studies in the elementary school and the senior high school. Thus only can the junior high school become a new educational force for the realization of its own accepted and distinctive purposes and for the fulfilment of the mission of all three units of the 6-3-3 organization to weld together our public-school system by the introduction of the unit of transition.

Tables I and II indicate a possible evolution of the program of studies as present tendencies toward more comprehensive units of instruction develop.

TABLE I
SIX GENERAL UNITS AND TWO PART-PERIOD UNITS*

General units:

1. English†
2. General mathematics
3. Social studies‡
4. Science§
5. Fine and practical arts
6. School health

Part-period units:

1. School activities
2. Guidance

* Based on a day of six one-clock-hour periods.

† See suggestion of community-life English course in the *Twenty-Second Yearbook of the National Society for the Study of Education*, Part II, p. 113. The co-ordination of English and foreign language suggests another modification of prevailing English courses.

‡ History, civics, social-political-industrial elements of geography, and junior business training or social-economic-industrial aspects of introductory commercial education.

§ Elementary and general science and the science elements of geography.

¹ Thomas H. Briggs, *The Junior High School*, p. 157. Boston: Houghton Mifflin Co., 1920.

THE SCHOOL REVIEW

TABLE II

SIX GENERAL UNITS AND TWO PART-PERIOD UNITS DISTRIBUTED
IN A WEEKLY SCHEDULE PRIOR TO AND
FOLLOWING INITIAL ELECTIVES

Prior to Initial Electives	Periods	Following Initial Electives
English	1	English 4
	2	
	3	
	4	
General mathematics	5	General mathematics 4
	6	
	7	
	8	
Social studies	9	Social studies 4
	10	
	11	
	12	
Science	13	Science 3
	14	
	15	
	16	
Fine and practical arts	17	Fine and practical arts 4
	18	
	19	
	20	
School health	21	School health 3
	22	
	23	
	24	
School activities	25	School activities 3
	26	
	27	
	28	
Guidance	29	Elective 5
	30	

A SURVEY OF A NIGHT HIGH SCHOOL

B. H. SIEHL
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In the general development of educational opportunities in this country the night high schools have played a very interesting rôle. Yet, in comparison with other schools, they have had little space devoted to their aims and achievements. In view of this fact and because of the importance of the subject, the writer submitted the following questionnaire to the students of the West Night High School. The school is held in the Hughes High School building, is located in one of the best suburbs of the city, and is representative of a very good class of young people. Of the 610 papers submitted, 481 were answered in full or in part. The matter of replying was, of course, purely voluntary.

If you did not attend the day high school, do not answer the first five questions.

1. Have you attended day high school?
2. Why did you leave the day high school?
3. Why did you come to night high school?
4. Do you prefer the day high school to the night high school?
5. Why?
6. How many years have you attended night high school?
7. Do you expect to use the night high school preparation to enter some profession, as law, medicine, teaching, etc?
8. If so, what profession?
9. If you do not expect to enter a profession, to what use will you put your night high school preparation?

The impression prevails that the student at the night high school is an elderly person who has returned to school because he or she realized the necessity of education for success in life. In part, of course, this is true, but it is true only in a very small part.

The ages of the students were tabulated as of the opening night, September 18, 1922. The ages were taken in whole numbers, the number called for being the age at the birthday nearest the

opening night. For example, if on September 18 a student was sixteen years and five months old, he was counted as a sixteen-year-old; if he was sixteen years and six months old, he was counted as a seventeen-year-old. The ages ranged from sixteen to fifty-four, the average age being 19.57 years. It is interesting to note that the ages of 563 students, or about 92 per cent, ranged between sixteen and twenty-four years. The ages of 610 students were tabulated, although only 481 answered the questionnaire. The full tabulation is given in Table I.

TABLE I

Age	Number of Students	Age	Number of Students	Age	Number of Students
16.....	40	25.....	7	33.....	1
17.....	116	26.....	7	34.....	2
18.....	159	27.....	7	37.....	1
19.....	97	28.....	3	41.....	1
20.....	64	29.....	6	43.....	1
21.....	31	30.....	2	46.....	1
22.....	25	31.....	5	51.....	1
23.....	17	32.....	1	54.....	1
24.....	14				

Night after night, as I watched the school assembling, I wondered why these young men and women did not continue at day high school and receive a regular high-school diploma. Behind the answers to that question I knew there lurked some intensely interesting human experiences.

The answers to the first question, "Have you attended day high school?" showed that 270, or about 56 per cent, of the students had attended day high school; 211 had not.

The answers to the second question, "Why did you leave the day high school?" are summarized in Table II.

It is often contended that the majority of students leave day high school for economic reasons. This study indicates otherwise. The fact that only about 15 per cent of the students left day high school for financial reasons shows that the day high schools have a very heavy responsibility in this matter.

It is very significant that 182 students, or about 67 per cent, had left day high school because they desired to go to work, to take

advantage of business opportunities, to enter business college, or because they had graduated from some particular course or had lost interest in day high school.

TABLE II

	Number of Students
Desire to go to work.....	75
Economic.....	41
Loss of interest in school or failure.....	29
Graduated.....	27
Business opportunity.....	25
Entered business college.....	18
Needed at home.....	8
Completed a two-year course.....	8
Illness.....	7
Parent's refusal to allow attendance at day high school.....	6
No reason to leave.....	6
Death in family.....	3
To study music.....	2
Pastor's refusal to allow attendance at day high school.....	1
Removal to another state.....	1
War work.....	1
School work can be studied at night.....	1

TABLE III

	Number of Students
To obtain a high-school education.....	67
To obtain more knowledge.....	53
For commercial education.....	49
To graduate.....	44
To go to college.....	26
Business required further education.....	9
To study subjects which were not studied at day school.....	4
Forced to go to day school; night school not compulsory.....	3
Forced to leave day school.....	3
To devote day hours to study of music.....	1
Night school next best to day school.....	1
To prepare for nurses' training.....	1
"Discovered how dumb I was".....	1

The answers to the third question, "Why did you come to night high school?" are shown in Table III. This tabulation developed some interesting points. The replies throw considerable light on

the attitude of the night high school student. In some places the idea prevails that the night high schools are attended by rowdies who are inspired by no proper motives. These replies need no comment. They typify a serious responsible student body. My experience of seventeen years proves these deductions to be true.

The answers to the fourth question, "Do you prefer the day high school to the night high school?" showed 138 in the affirmative and 106 in the negative. The answers to the fifth question, asking for the reasons for the preference, are shown in Table IV.

An analysis of the preferences for day high school shows that about 92 per cent of the preferences are based on the fact that the day school furnishes a more thorough education, that there is more time for study, that the strain is not so great, and that more attention is paid to detail. The preferences for night high school are scattered. Twenty-four students, or about 23 per cent, prefer night high school because night high school gives the students an opportunity to help support the family while they are obtaining their education.

The answers to the sixth question, "How many years have you attended night high school?" are shown in Table V (p. 538).

Of the 481 pupils, 228, or about 47 per cent, had attended night high school for more than one year. Those who had attended night high school for five, six, or seven years are probably not failures. There is a five-year academic curriculum and also one covering four years; in addition, there is a one-year bookkeeping course and a one-year stenographic course, or a combination course including both bookkeeping and stenography, for those who have completed the academic curriculum.

The purposes to which the night high school education was to be put were most interesting. The answers of the students in night high school are more valuable than those of day high school students because they are more reliable. The average age, 19.57 years, shows that the students have had some experience in the world and, in most cases, are studying with a definite aim in view. The superiority of the attitude of this type of student over the attitude of the ordinary desultory day high school student is apparent to a casual observer. The type of work selected speaks eloquently.

TABLE IV

	Number of Students
Preferring day high school:	
A more thorough education	71
More time to study; not so hard a strain; more detail	47
More time for friendships, pleasure, and school activities	5
More interest taken in pupils	1
Athletic training more available	1
More business-like	1
Preferring night high school:	
Can help support family and obtain an education	24
Business experience makes one appreciate education at night	8
Night-school pupils are more industrious and friendly	6
Night school just as good in important subjects	5
More interesting	5
Sincere effort not found in day school	5
While making headway in business, can also get an education	4
Night school teaches only necessary subjects	3
Day school spends too much time on unnecessary detail	3
Shorter time with older people	2
Not so strict; make better use of time	2
Hour period enables one to accomplish more than at day school; pupils attend because they want to	2
Can pick subjects	2
More time for music	2
Learn more in two days at night school than in five days at day school	1
Can do better work and accomplish more	1
In day school, too much play; at night you come to learn; stu- dents do not show off	1
Frills and unnecessary subjects eliminated from night school	1
More "pep" and energy at night	1
Better class of students; better teaching	1
More practical	1
More condensed subjects	1
Like night-school methods better	1
Not so long	1
Less time wasted	1
Opportunities are the same	1
Day school was not over after school hours but continued at night	1
Too many hours in day school	1

The answers to the seventh and eighth questions, "Do you expect to use the night high school preparation to enter some pro-

Number of Years	Number of Students
½	171
1	82
1½	29
2	96
2½	12
3	52
3½	5
4	25
5	7
6	1
7	1

fession, as law, medicine, teaching, etc.?" and "If so, which profession?" are shown in Table VI.

	Number of Students
Law	34
Engineering	23
Accountant	21
Teaching	20
Medicine	20
Nursing	12
Chemistry	8
Ministry	4
Pharmacy	3
Journalist	2
Law or medicine	2
Kindergarten work	1
Law or teaching	1
Secretaryship	1
Dentistry	1
Optometry	1
Librarian	1
Mechanics	1
Chiropractor	1
Architect	1
Editor or writer	1
Commercial art	1
English	1
Foreign missionary	1
Artist	1

The answers to the ninth question, "If you do not expect to enter a profession, to what use will you put your night high school preparation?" are shown in Table VII. Under "Business" are included those who were preparing to become stenographers, bookkeepers, railway mail clerks, secretaries, advertisers, bankers, and those who were taking the work in order to have the necessary preparation to be promoted to better positions.

TABLE VII

	Number of Students
Business.....	165
Better education.....	50
To enter college.....	17
For future use, safety first.....	3
To become a better citizen.....	3
High-school education necessary when applying for a position.....	3
To feel more respectable.....	1
Knowledge of Spanish necessary for export department, government service.....	1

The answers to the eighth and ninth questions showed that 328 of the 481 students who answered the questionnaire, or about 68 per cent, came to night high school for distinctly vocational reasons. It is significant that 163, or about 34 per cent, were preparing to enter some profession; 20, or about 4 per cent, expected to teach.

Besides preparing for professional and other activities, the night high school is justifying its existence in the community. Although the answers to the eighth and ninth questions showed that 68 per cent of the students came to night high school for vocational reasons, yet the broader life which comes to these young people from their association with teachers and with each other, from careful application to their studies, and from unselfish loyalty to the school and school interests, makes them abler and better citizens—citizens to whom much is given and from whom much is expected—citizens more able to develop true democracy and transmit it to their followers. Therefore, most certainly, the night high school justifies itself and serves the community.

ARTICULATING THE JUNIOR AND SENIOR HIGH SCHOOLS

ARTHUR W. FERGUSON
Superintendent of Schools, Swarthmore, Pennsylvania

During the winter of 1922-23, the writer made an intensive study of the manner in which the Holmes Junior High School of Philadelphia was articulating with the two senior high schools to which it sends its graduates. The results of the investigation suggested certain problems of articulation that could very well arise in any school system instituting the junior high school. Of these problems, the following were singled out and made subjects for a nation-wide study: the length of time necessary to achieve satisfactory articulation between the senior high school and the junior high school, the subjects in the senior high school presenting the greatest difficulty for the junior high school graduate, the reasons for these difficulties, and the general attitude of the two institutions toward each other.

The immediate practical problem that the junior high school graduate faces in the senior high school is the problem of making good in the new environment as he finds it. That the senior high school is not the sort of institution that the junior high school would have it be does not help the pupil in his difficulties. Whether the senior high school is progressive or traditional, whether it is sympathetic with or antagonistic to the junior high school, the fact remains that the junior high school graduate must face, in the senior high school, conditions as they are and not as they ought to be. Hence the emphasis in the nation-wide inquiry was on the difficulties that the junior high school pupil must meet, in many cases, in the upper secondary school.

To get at the facts, both from the angle of the senior high school and from the angle of the junior high school, two questionnaires were prepared. One hundred and twenty-five of these questionnaires were sent, for the most part to cities in which the junior high school

had been established for a relatively long period. The senior high school questionnaire was sent to the same cities in order to get reactions from the two institutions in the same city. Replies were received from 37 junior high school principals distributed through 17 states and from 36 senior high school principals distributed through 11 states. A total of 73 replies were received from principals scattered through 18 states. Analysis will be made first of the junior high school questionnaire.

JUNIOR HIGH SCHOOL QUESTIONNAIRE

1. Were the pupils who were promoted to the senior high school at the end of the first year that your school was in existence as a junior high school able to do the work of the senior high school without serious handicap? Yes, 30; no, 5; unable to say, 2.

2. How many years elapsed after the establishment of your school before there was general agreement that its graduates were successful in the work of the senior high school? One year (unqualified), 15; one year (qualified), 11; two years, 1; three years, 6; indefinite, 4. The following are some of the qualifications made by those answering "one year."

You will never have general agreement until deep-seated prejudices against the junior high school are overcome. This will not come until we have a new generation of senior high school teachers.

At present, ninth-grade pupils receive a diploma admitting them to the tenth grade.

When our school was first organized, the curriculum was identical with that of the seventh and eighth grades in the elementary schools with the addition of Latin and German. The only difference between these grades in our school and the same grades in the elementary schools at that time was that we were organized on a departmental basis. Our ninth grade was almost identical with the senior high school ninth grade. Since the adoption of our new intermediate curriculum we have had more difficulty in the articulation. However, these difficulties are gradually being adjusted in the planning of the new senior high school curriculum.

None, for there was no abrupt establishment, rather a gradual evolution.

From the first our pupils were able to do more advanced work in mathematics and languages than pupils who had not had junior high school training.

3. With what subjects have the graduates of your school had the most difficulty in the senior high school? Foreign language,

18; mathematics, 16; English, 6; commercial subjects, 3; mechanical drawing, 1.

4. To what do you attribute these difficulties? The following comments were made with reference to foreign language:

Direct method in junior high school, grammatical method in senior high school.

Refusal of senior high school to credit work done in junior high school.

Our difficulty in the field of foreign language has arisen from the fact that pupils with low intelligence quotients cannot learn a language by means of an academic study of its fundamental structure. Their way of learning a language is by full and motivated experience with the language. This method most high-school teachers are unwilling or unable to employ.

The following comments were made with reference to mathematics:

General difficulty with mathematics throughout the grades.

Textbook.

High-school mathematics is different and difficult. It has not been sufficiently adjusted to the needs of the child.

The following comments were made with reference to English:

Lack of theme preparation. Inability to state thought clearly, however simple.

Frequent changes in teaching staff.

Failure to get technical grammar.

English not sufficiently stressed in seventh and eighth grades.

Difference in ideals of two schools.

During the first years of the junior high school we gave less attention to technical English than was formerly given in the grades. All criticism in the senior high schools came as a result of this; but our graduates talked and wrote better than before.

The following comment was made with reference to commercial subjects:

In the case of typewriting, wrong standards for rating students. In shorthand, students lack English background and experience.

The following general comments were made:

Nature of subjects, immaturity of some pupils, lack of capacity on the part of some.

Lack of articulation between the senior and junior high schools.

Same subjects [English and mathematics] were difficult in the junior high school.

Lack of judgment as to what should be accomplished and no provision for grouping by ability.

Different administrative point of view.

Due purely to lack of careful preparation for such articulation.

Lack of continuity in subject-matter.

The attitude of the principal and faculty of the receiving school.

Departmental work is apt to throw responsibility for a subject on one teacher. If the teacher of French is poor, then all pupils in French receive poor instruction.

Salary schedules.

Hardened teachers in the senior high school.

Shorter periods and more subjects in the junior high school.

5. What readjustments in curriculum or methods of teaching have been necessary in your school to facilitate the success of its graduates in the senior high school?

Uniform course of study for same grade in all schools.

Stressing algebra in general mathematics.

No readjustment in curriculum, but senior high school methods of teaching adopted.

Have limited time devoted to special activities, have changed methods in French, and have returned to more rigid drill on technical English.

We have had in mind the needs of the child rather than preparation for high school. We have tried to select subject-matter and modernize our methods.

Compromise with senior high school to some extent by putting science and language on a different basis. No readjustment of method.

At present a little more emphasis is being placed on grammar. The recasting of courses in the senior high schools, with one exception, has not taken place as it should.

Longer periods. Supervised study.

More time to algebra. More elective subjects.

Metric system added to mathematics as basis for science work in senior high school.

More formal grammar.

6. Do you feel that these changes have vitiated any of the fundamental purposes of the junior high school? Yes, 3; no, 19.

SENIOR HIGH SCHOOL QUESTIONNAIRE

1. Principals receiving pupils from both the elementary school and the junior high school—How do the pupils of the junior high school compare with the pupils who have spent the ninth grade in the senior high school, in preparation to do the

work of the tenth grade? Principals receiving pupils from the junior high school only—How do the graduates of the junior high school compare with the pupils who formerly came from the elementary school, in preparation to do the work of the senior high school?

Combined answers: Better prepared, 7; as well prepared, 11; less well prepared, 7; judgment suspended, 4; receive no junior high school pupils, 4; sending school not a real junior high school, 3.

2. (a) In what subjects has the junior high school graduate most conspicuously failed? Mathematics, 14; foreign language, 12; English, 5; commercial subjects, 2. (b) To what do you attribute these failures? Poor teaching, 5; poor texts, 3; poor equipment, 2; differences in objectives, 2; idea of play; immaturity of pupils; too much "try out" and not enough "carry on"; lack of reorganization of elementary-school subjects; difference in methods; attempting too much; high percentage of dull pupils.

3. (a) In what subjects has the junior high school graduate achieved marked success? English, 4; science, 2; Latin, 1; French, 1; hand work, 1; no subject, 11. (b) To what do you attribute this success?

English.—Substitution of literary study for formal reading lessons. More emphasis on oral composition.

Science.—More initiative.

General comments.—Junior high school methods. Socialization.

4. Is there any evidence that the junior high school graduate is better equipped to assume leadership in the social life of the school? Yes, 10; no, 13.

Yes, because the junior high schools have patterned their school life after that existing in the senior high school.

No, a little more ready to try.

Decidedly yes.

He has had more training, and I think he shows it in the senior high school.

Yes. I think he is better trained in resourcefulness and initiative—not in stability.

5. What readjustments in curriculum or methods of teaching have been necessary in your school to assimilate more easily the junior high school graduate?

Review of work already done.

Special coaching of junior high school graduates in English, foreign languages, and mathematics.

We have reorganized our curricula and subject-content and developed the project and socialized form of recitation.

We have changed our French and Latin courses.

We have had to reach down in algebra to help up the incoming students. We believe that too little drill on fundamentals is given in the junior high school.

They [junior high school graduates] have been kept together in classes as far as possible.

6. Do you feel that these changes have lowered or raised the scholastic standards of your school? Lowered, 4; raised, 4.

Replies were received from both junior high school principals and senior high school principals in nineteen cities. A study was made of the agreement exhibited by the answers of these principals, with the following result: In general: agreement, 17; non-agreement, 2. In details: agreement, 15; non-agreement, 4.

The writer carefully studied the questionnaires returned by the senior high school principals for the purpose of determining their general attitude toward the junior high school. They grouped themselves as follows: sympathetic, 21; unsympathetic, 10.

The following general comments on the junior high school were made by senior high school principals.

I would like to see the junior high school continue as a two-year school. I think it could do all it now does toward the socialization of the child, and the senior high school could get him in time to participate effectively in educational guidance.

The junior high school has possibilities. The freedom it accords to very young pupils is often their undoing. Home study is often discouraged. There is too much playing at work. They do not "dig in" or lay adequate foundation. Much of the work has to be done over again in the tenth grade. More concentration-less dissipation—is needed. Too many young and inexperienced teachers.

One junior high school principal states the problem of articulation as follows:

There is one thing which is bound to result from the operation of such a retention factor as has resulted from the junior high school and that is the promotion into the tenth grade of a mass of weak human material which heretofore has never survived to the senior high school and of whose pedagogical characteristics the typical senior high school teacher has no understanding whatever. High-school teachers do not understand that this weakness is not a matter of preparation, but rather one of congenital limitation.

Those pupils who are of the type that have always done senior high school work should do better work than ever before. This is the responsibility of the junior high school. The other pupils who are new to the senior high school should succeed in their work. This is the responsibility of the senior high school. With reference to the latter group, the junior high school has done its part when it has succeeded in keeping them busy and interested to the point that they are desirous of going on into the tenth grade.

One fact clearly brought out by the questionnaires promises to delay the day of satisfactory articulation of junior and senior high schools in many places. On the one hand, there is an enthusiastic group of junior high school principals so convinced of the destiny of the new institution that they cannot see the possibility of pitfalls ahead. These men are prone to make extravagant claims for the junior high school on flimsy evidence. On the other hand, there is a conservative group of senior high school principals who, even if they accept the junior high school, do so in the spirit of a "woman convinced against her will." One of the distinguishing characteristics of these men is that they cannot conceive of the junior high school as having any reorganizing influence on the senior high school. When these two types appear in the same school system, the junior high school begins operations under a serious handicap.

In conclusion, the writer suggests a program of articulation in outline form and without comment. Its features contemplate some problems that were not stressed by the questionnaires. They seem to the writer to be reasonable solutions for the five fundamental difficulties that are apt to arise in attempting to secure proper co-ordination between the junior and senior high schools.

1. To "sell" the junior high school idea to senior high school teachers and administrators.
2. To plan in advance the academic work of the junior high school, such planning to be participated in by senior high school teachers.
3. To set up an expanding program of student activities from the seventh grade to the twelfth grade.
4. To instal a continuous program of guidance through the six secondary grades.
5. To appoint teachers in the junior high school on the basis of secondary-school standards.

Educational Writings

REVIEWS AND BOOK NOTES

Bridging the gap between theory and practice in the teaching of high-school administration.—It has long been recognized that one of the most crucial problems in professional training of any sort is the establishment of a vital relationship between theory and practice. To meet this problem, the legal profession has developed the technique of teaching many of its facts and principles through the study of actual legal cases. The medical profession requires, in addition to the mastery of a body of knowledge, laboratory practice and hospital experience before releasing the physician to try his knowledge and skill as an authorized practitioner. There are now few training schools for teachers which do not provide opportunities for both observation and practice under competent supervision as a part of the professional training of the would-be teacher. But in the training of principals and superintendents no such provisions have as yet been made for bridging the gap between theory and practice. The courses in administration in many professional schools are still little more than expositions of the theory of administrative work.

A book¹ of exercises has been prepared to meet this long-recognized need in the training of high-school principals. The seventy-five exercises contained in the text consist of project-problems, each of which embodies a situation, either real or hypothetical, likely to be found in actual school work. The problem is presented for solution at the time the theoretical knowledge is being acquired. The editor of this volume believes that "if the student can use his knowledge skilfully in solving these printed problems, the chances are greatly increased that he can—and what is equally important, that he will—use this knowledge later in solving actual problems as they arise" (p. i).

The book is so constructed that the pages on which the exercises are printed may be detached. The student can write his solution in the blank space and turn in the page to his instructor for criticism, after which it can be filed in any standard notebook cover for future reference. The form of the exercises makes them adaptable in whole or in part to different courses in secondary education.

The exercises cover a wide range of problems bearing on the curriculum, classroom standards, educational guidance, testing, credit administration,

¹ J. B. Edmonson, *Problems in Secondary Education*. Bloomington, Illinois: Public School Publishing Co., 1923. Pp. vi+76.

supervised study, schedule-making, extra-curricular activities, selection and rating of teachers, salary schedule, supervision of instruction, building plans, publicity, and professional ethics.

The exercises have been very carefully prepared and are so practical in character that the student will have little difficulty in identifying them in his later administrative work. Taken as a whole, they will contribute to courses in secondary-school administration which need vitalizing and, if carefully worked out by the student, they will constitute for him a "case-book" which should prove valuable in his first administrative position.

W. C. REAVIS

Curriculum problems in secondary education.—The discoveries of the last decade with respect to individual differences among children, now quite prominent among the factors which determine practice in school administration, have been slow to write themselves into the curriculum. The high-school course of study particularly, always slow to respond to the touch of the hand of the professional educator, has shied at the idea that one child's meat may be another child's poison. Since individual differences increase rather than diminish as children get older, the complexities which grow out of this phase of human nature are more acute in the high school than in the earlier grades. The conventional solution has been to eliminate from the high school all except those who take reasonably well to the traditional offerings.

A recent book¹ faces the problem squarely and attacks it from many directions. The three divisions of the volume take up, respectively, the basic principles of curriculum-making in secondary schools, the historical development of curricula under the various plans, past and present, in operation in this country and elsewhere, and the principles and practices now being tried out in secondary schools. In addition to the general scheme of the book as thus outlined by the author in his preliminary chapter, other subdivisions are discernible.

Chapters ii-iv set forth the general pedagogical considerations which must be taken into account in curriculum-making. Chapters v-vii are devoted to the nature of the child as that nature is significant in curriculum-making. Chapters viii-ix deal with secondary-school subject-matter, European and American. Chapters x-xi show the bearing of junior high school and junior-college ideas upon the question. Chapter xii draws from the preceding discussion a formulation of curriculum creeds and criteria.

Chapters xiii-xx offer reconstructions of the various secondary-school subjects, including physical education and extra-curricular activities, in conformity with the principles developed in the preceding chapters. Chapter xxi summarizes current tendencies and practices. The appendixes deal with

¹ John Addison Clement, *Curriculum Making in Secondary Schools*. New York: Henry Holt & Co., 1923. Pp. 534. \$2.00.

physical education, with considerations growing out of experimentation in the University High School of the University of Chicago, and with conclusions reached by the National Society for the Study of Education in its Twenty-second Yearbook, Part II.

Worthy of appreciative mention are the bibliographies, the "Information and Drill Exercises," and the "Practical Questions and Problems" found in connection with the several chapters.

An interesting paragraph gives the central thought of the chapter on "Criteria and Creeds in Curriculum Organization."

With the above assumptions in mind it is the author's conviction that certain subjects lend themselves more easily than others to satisfactory reorganization in secondary education. It will be necessary to reorganize the subject-matter included under the traditional subjects if they are to be retained and meet the newer objectives, but it is also necessary to standardize and evaluate the content of the newer subjects introduced. In the light of the above assumption, the author has the conviction that out of the traditional subjects, English, history, and other social sciences, natural science, and certain aspects of mathematics and of foreign languages have a claim, and chiefly in the order named; but that, of the newer subjects in the field of practical and fine arts, of physical education, and even of the so-called extra-curricular activities, there is, too, a certain minimum amount of subject-matter to be offered in order to realize present-day secondary-school objectives [pp. 249-50].

As a summary of the many and varied considerations which bear on the question of secondary-school curriculum-making, the book is of unusual interest and value.

H. H. RYAN

BLEWETT JUNIOR HIGH SCHOOL
ST. LOUIS, MISSOURI

History, civics, and economics in the high school.—For a number of years the Joliet Township High School, Joliet, Illinois, has been doing work of a high character in the fields of history and other social studies. Since 1914 articles have appeared from time to time in educational magazines describing the content, aims, and outcomes of this work. Those who have followed these articles with increasing interest will be delighted to know that the courses as they are now taught have been published² and may be secured gratis by writing to R. H. Bush, head of the Department of Social Science.

The curriculum outlined and required of all students includes a course in Occupations twice a week in the freshman year, a course in Civics three times a week in the sophomore year, a one-year course in World Survey of History in the junior year, and a one-semester course in American History and a one-semester course in Social Economics in the senior year. Each of these courses is outlined in some detail. Extensive bibliographies for the student's use are

² *History and Social Science Curriculum of the Joliet Township High School.* Joliet, Illinois: Joliet Township High School, 1923. Pp. 190.

also given for some of the courses. Suggestions relating to method of procedure appear here and there throughout the outline.

The plan followed in presenting the work in a field of history is to give the general organization and the teaching outline used. The general organization contains merely a statement of the main topics on which the course is based and the four, five, or more important topics under each main division. For example, the main divisions used in American history with the percentage of time devoted to each are: (1) Organization and Connection with European History, 7 per cent; (2) Revolution and Establishment of the American Nation, 23 per cent; (3) Nationalism and Democracy, 1789-1829, 20 per cent; (4) Expansion and Conflict, 1829-65, 20 per cent; (5) Reconstruction and Consolidation, 1865-98, 23 per cent; and (6) World Power and the New Democracy, 1898, 7 per cent.

The teaching outline for the field of American history includes an outline of each topic under each of the main divisions, suggestions regarding maps to be made, and a goodly supply of thought-provoking questions. This outline could be given to the student and be used as the basis for day-by-day assignments.

Mr. Bush and the members of his department have made a substantial contribution to better social-science work in high schools. Let us hope that the good work they have done will stimulate other high-school social-science departments to undertake similar pieces of work. If there is another high school in the United States that has published the work it is doing in the social sciences in the same detail as that found in the publication under review, the writer does not know of it.

R. M. TRYON

Educational psychology.—*Psychology for Students of Education*¹ is the attractive title of a new book written "to meet the needs of students who are seeking from psychology the facts and principles that have a bearing upon their problems" . . . and "which is designed to serve both as a text for college and normal courses and as a book for general reading." The author attempts to present the more important principles of psychology with illustrations and applications which are of distinct significance in education. But little space is given to studies of the sensory processes, perception, and introspective analysis. "Mental processes are treated as varieties of reactions and types of learning rather than mental structures." Much emphasis is given to the mechanics and dynamics of human nature. The functions of the receiving, connecting, and reacting mechanisms, rather than their structures, are emphasized.

That the book is a text in general psychology rather than in educational psychology is evident from the chapter titles: "The Methods and Subject-

¹ Arthur I. Gates, *Psychology for Students of Education*. New York: Macmillan Co., 1923. Pp. xvi+490.

Matter of Psychology," "The Receiving Mechanisms," "The Connecting Mechanisms," "The Reacting Mechanisms," "Conscious States and Processes," "Instinctive Activities," etc., "The Emotions," "The Dynamic Rôle of Instincts in Habit Formation," "Learning," "Acquisition of Percepts and Ideas," "Reasoning and Problem-solving," "The Transfer of Training," "Influence of Continuous Work, External Conditions, and Drugs upon Efficiency," "Individual Differences," "Intelligence," "The Measurement, Organization, and Correlation of Traits." Questions, exercises, and references at the end of each chapter add to the value of the discussions, especially in aiding the student to think clearly on the subject and to suggest possible applications of the principles learned.

The book will undoubtedly meet with great favor among teachers in normal schools where the belief exists that general psychology should precede or take the place of educational psychology. It is carefully written and well organized. The chapter on "Intelligence" is hardly up to the standard of the other chapters. No attempt is made to utilize some of the recent studies of Professor Bagley, whose data show conclusive evidence of the influence of the quality and quantity of schooling received on intelligence ratings. The tenor of the chapter is fatalistic and, as such, will likely cause many teachers to regard certain of their charges as merely so many beings to be endured so many hours a day, rather than impart a message of hope.

Many topics which one would expect to find discussed in any psychology text are either barely mentioned or not discussed at all. I refer to such topics as stages of mental development, the adolescent period, how to influence people, play, language as a mode of behavior, educational tests and measurements, supervised study, contributions of experimental psychology and experimental education, psychology of school subjects, exceptional children, attention, imagination, interest, apperception, mental attitudes, self-activity, will, and character.

Any book in psychology designed for students of education must be evaluated in the light of educational philosophy in general and in the light of our conception of a course of study for teachers in training in particular. The present reviewer believes (1) that a foundation course in educational psychology, not general psychology, should be given during the first year of normal-school training supplementary to a course on Introduction to Teaching, that each course of professionalized subject-matter should include a discussion of the psychology of the particular subject, and finally that the principles of educational psychology should be duly emphasized and incorporated as a part of a general concluding course that might be designated Principles of Education, to be given in the last semester of the normal-school course; (2) that principles should be developed inductively from a psychological analysis of classroom problems and situations that actually arise; and (3) that any adequate treatment of educational psychology should include such important topics as are enumerated in the foregoing paragraph.

Dr. Gates has done exceptionally well the task he set out to do. His book represents a distinct advance over most other books that have been written for students of education. Whether or not this is the kind of psychology needed for those who are destined to get one course only—and they are legion—is another question. Aside from being quite academic and far removed from the life of the classroom where teacher, pupils, and curriculum come together, the book is the best that has yet appeared in which an attempt has been made to make available to the student the most important contributions of behavioristic and dynamic psychology.

CHARLES EDWARD SKINNER

MIAMI UNIVERSITY

Another practical composition book.—Of composition books claiming to be practical, there is no end. William Williams and J. C. Tressler are the authors of the latest¹ of these practical composition books. They justify their claim on the basis that the book gives prominence to practice rather than theory and that the exercises are carefully planned to prepare for practice in life. It is evidently intended for a first- or second-year book. Each of the two parts—“Exercises in Speaking and Writing” and “The Sentence and the Word”—is complete in itself. The first of these parts, in addition to chapters on narration, description, exposition, and argumentation, includes chapters on conversation, oral reading, and extemporaneous speaking; the second part introduces no material other than that usually found in rhetorics. Throughout the book there is a wealth of illustrative material, all of which is well chosen and well handled. There are long lists of suggested topics for each exercise. The book is carefully written and clearly organized. If one must continue to teach composition as it has been taught, this is a good book for the purpose.

The book is disappointing in that it brings no new contribution to the composition teacher. The authors state the problem before the English teacher thus: “In many schools arousing in pupils a keen desire to speak and write better, developing a language conscience, and securing the active co-operation of the pupils in making good English popular and desirable outside of the classroom are half the English problem” (p. iv). The book, however, does not solve this problem, since the authors assume that habits of speaking and writing can be established through artificial situations in the English classroom which represent as nearly as possible situations the pupils will face in life. The book brings forcefully to the mind of the reviewer the need, not for more composition books, but for a guide-book to composition which will show the teacher how to seize and use natural composition situations as they arise in the pupil’s everyday work in literature, foreign-language study, science, and history. Until this is done, few habits of speaking and writing will be established.

MARTHA JANE MCCOY

¹ William Williams and J. C. Tressler, *Composition and Rhetoric by Practice*. Boston: D. C. Heath & Co., 1923. Pp. viii+472.

An intermediate French text.—Progressive modern-language teachers of today feel that conversational facility is an indispensable part of the training of any student who wishes to catch the real spirit of what he reads in a foreign tongue. Conversational drill in class work fails to produce definite results unless carefully organized around a central idea developed with abundant repetition. Mr. Kueny provides valuable aid for such drill in a text¹ suitable for supplementary work after one year of high-school French or a half-year of college French.

The book contains one hundred lessons of two distinct types. There are fifty lessons with a vocabulary and some explanatory material followed by some forty or fifty questions so worded as to incite correct, quick answers. These lessons deal either with a specific subject such as *Les Sens et la Parole* or with a related group of idiomatic phrases such as "J'y suis, j'en suis, and je le suis." The alternate fifty lessons open with a passage of connected French which the pupil is expected to memorize and reproduce in different tenses and persons according to clear illustrations and directions. Of these two types of lessons, the second seems more calculated to inspire real conversation. Vocabulary presented in exhaustive groups is not so apt to become a real acquisition as that centered around a plot, however simple.

The grammatical explanations are very clear and pointed. The presentation of the formation and use of the imperfect tense is excellent. It is to be regretted that the terms "imperfect" and "past definite" have not been replaced by the terms "past descriptive" and "past absolute." The treatment of the subjunctive seems inadequate in the conversational drill provided, but the verb drill as a whole is very skilfully introduced.

The material of the book is practical and lively and presented in such a form that constant repetition is inevitable. Any class that will co-operate in this type of linguistic manipulation will necessarily approach the goal set by the author: "correctly formed sentences, pronounced with proper speed and intonation."

ETHEL PRESTON

Modern literature for oral and silent reading.—It is no longer necessary to plead for modern and current literature in the classroom or to urge the need for teaching effective methods of silent reading. Progressive teachers everywhere are convinced on these matters. One welcomes, therefore, a book² of selections for classroom use in the junior high school which has been compiled with these two purposes in view. The book is in two volumes, of which the first is the better, not only because it contains a larger proportion of well-chosen

¹ François J. Kueny, *Pour Apprendre à Parler*. Chicago: Allyn & Bacon, 1922. Pp. xxiv+262.

² John W. Davis, *Modern Readings*. Vol. I, pp. xx+344; Vol. II, pp. xx+344. Boston: D. C. Heath & Co., 1923.

narratives, but because the descriptive and expository passages are concerned with subjects more within the range of children's natural interests than "Church Architecture" and "A Bit of Old London," to mention only two items from the second volume. The prose selections of Volume I are peculiarly well chosen to introduce pupils to a more mature type of reading than is generally presented to them in literature classes. They are admirably short, thrillingly interesting, and in vividness of effect appealing to boys and girls.

One of the chief faults of the book lies in the fact that much of both poetry and prose is chosen from the literature of the world war and is therefore less and less meaningful to children as the years bring pupils into the junior high school who were only seven or eight years old at the time of the war. One might defend the inclusion of such prose selections as "The Real Story of Chateau-Thierry" and "Our Unknown Soldier" on the ground of their historical value, but some of the more journalistic prose and the poetry is less defensible. The poetry of the volumes is, as a whole, less admirably chosen than the prose. There might well be more emphasis on narrative poetry and less on subjective and adult poems like Aline Kilmer's "I Shall Not Be Afraid" and Thompson's "The Hound of Heaven." A few of the prose narratives, such as "The Pier," by G. A. Birmingham, and "The Lucky Number," by Roger Regis, are so cynical and disillusioning in their presentation of human nature as to be hardly desirable for young readers.

On the whole, the book has some well-chosen poetry and many worthy passages of prose not easily accessible elsewhere in form for classroom use. Any teacher who desires to develop in her pupils ability to read with interest the types of journalistic and literary prose commonly found in the better magazines, newspapers, and books of today would do well to examine these volumes.

EDITH E. SHEPHERD

A history of the last century.—The counter-chronological method of approach in the teaching of history has often been advocated. The adoption of this method in the writing of history, however, is an innovation. It is this unusual feature which impresses one first in examining a new volume¹ which deals with the history of the last one hundred years. Instead of providing a discussion of the Congress of Vienna and the peace settlement of 1815 in the first chapter, as is common in other works dealing with the period covered by this volume, the authors begin with a discussion of the events leading to the Treaty of Versailles and an account of the peace settlement of 1919. Another feature claimed as unique for the book is "the constructive treatment of, and the comparatively large space devoted to, the social and economic problems throughout the century" (p. 5), a claim which, on the whole, is substantiated.

¹ Harry Grant Plum and Gilbert Giddings Benjamin in collaboration with Bessie L. Pierce. *Modern and Contemporary European Civilization*. Philadelphia: J. B. Lippincott Co., 1923. Pp. 414. \$2.20.

The volume is divided into seven parts, as follows: "The Great Peace—the Treaty of Versailles," "The Failure of European Diplomacy," "The Near Eastern Question," "Nationality and Democracy," "Commerce and the World War," "The State and Industrial Democracy," and "The United States and the War," the last section being written by Bessie L. Pierce, who also contributes the suggestions for study and the references which accompany each chapter. Each of the seven parts of the volume is treated in a chronological manner, the conditions at the beginning of the nineteenth century or at an earlier period being first sketched, and the chief developments in the history of the topic under discussion being then treated in chronological sequence. In this way the history of the last one hundred years is covered six times, each time from a different angle. Thus, in Part II, the authors describe the efforts which have been made by three generations to establish a lasting peace, including in their narrative such matters as the Holy Alliance, the various international congresses which have been held during the nineteenth century, the Triple Alliance, the Triple Entente, the Hague peace conferences, and the League of Nations. The other parts of the book are handled in like manner. In this way the authors link the events of the past with outstanding problems of the present.

Although little originality either in interpretation or in materials appears in the volume (the authors, indeed, disclaim any pretense at originality in materials), the book is a creditable piece of work, and the topical organization which it embodies will enable it to meet a real need. The exceptionally full treatment given to social and economic problems is also commendable. The volume is burdened perhaps with relatively unimportant details and, in consequence, is probably a bit heavy to serve as a satisfactory high-school text. It will, however, prove a valuable reference for special reports and for supplementary reading, and its direct relation to the world war and to present-day problems should make it a welcome addition to the high-school library.

HOWARD C. HILL

Confusion in our English teaching.—The examination of two recent books¹ for use in seventh- and eighth-grade English classes can scarcely fail to make the English teacher consider his aims. Each book attempts to teach usage, some formal grammar, oral and written composition (both practical and artistic), and appreciation of literature. They plan also for a story-teller's club, a historical society, a class newspaper, and a good English club. The fact that the average English textbook offers this hodgepodge should make us think. Are we not confusing the forming of habits in a useful process with an artistic product simply because the artist has used our tools? Is there

¹ Rose Buhlig, *Junior English*. Book I, pp. x+222. Book II, pp. vi+258. Boston: D. C. Heath & Co., 1923.

any reason why the appreciation of literature must be linked with the formation of punctuation habits?

That confusion does exist is shown by the author's attempt to secure enthusiastic interest in every lesson. If permanent interest in literature is not aroused through the study of good books, the teacher has failed; but the pupil can, by sensible application, learn to recognize and punctuate a sentence. The author of these books has felt it necessary to supply artificial interest by turning every drill into a game. The bean-bag is ever present. Pupils "hit the bull's eye," play "compound checkers" and "dictionary shinney," run "alphabetical races," and "take tricks" while they are trying to learn parts of speech, principal parts of verbs, and good spelling.

Are we not underestimating the mentality of our boys and girls when we refuse to believe that they might take a less frantic, but more sensible, interest in learning to use a fine tool with precision and accuracy? Must they always depend on competitive sports for interest in an intellectual pursuit?

GLADYS CAMPBELL

The demands of democracy on instruction in English.—Professor Barnes has produced, in very readable form, the best statement that the present reviewer has seen of progressive thought in regard to teaching the mother tongue.¹ Throughout the discussions the author stresses the functional value of all branches of English instruction. He condemns formalism, whether it appears in the analytical study of great literature far beyond the assimilative capacity of pupils, or whether it appears in the writing of stilted themes prescribed by "book-minded" teachers. He advocates all of those lines of training which fit boys and girls to do well their parts in the life of a true democracy. Efficiency and culture, together the characteristics of an educated man, are to be served by the teaching of literature as an expression of life all around us, by the teaching of composition as the worthy expression of the student's own experiences, and by the inculcating of all language skills as indispensable tools of everyday work.

Professor Barnes has made a valuable contribution; he has provided food for thought on the part of both extreme conservatives and extreme radicals. Every chapter repeatedly challenges teachers of English to weigh their materials and their methods in the light of their desired product—capable citizens for a democratic society.

R. L. LYMAN

Masculine English.—Under a title that tends at first to prejudice unfavorably the academic person who examines the book,² Homer J. Smith, of the

¹ Walter Barnes, *The New Democracy in the Teaching of English*. Chicago: Rand McNally & Co., 1923. Pp. 96.

² Homer J. Smith, *English for Boys and Men*. Boston: Ginn & Co., 1923. Pp. xxii+330. \$1.40.

University of Minnesota, has given teachers of English, especially in industrial or continuation schools, a valuable handbook for teaching correct usage and effective composition. The presentation makes a distinct departure from the usual method in that in the arrangement of materials the logical order of grammar is entirely subordinated to the actual order of the need of the untrained worker who seeks to improve his oral and written expression. The book indicates clearly that it has grown out of the author's experience in industrial education; in so far as his experience may be accepted as typical of universal experience in this type of work, the book may be considered as meeting a universal need in English training in trade schools. Each lesson is a unit in itself; the learner may enter the book at any lesson which a pre-test would indicate to be suitable for him. The book permits, therefore, individualization of instruction to a high degree. Among the elements presented are: the making of sentences, spelling, homonyms, syllables, accent, synonyms, the various parts of speech, punctuation, miscellaneous errors for correction, and paragraph-building. There is constant reiteration of the problem of effective sentence-building, and in all of the exercises the subject-matter is drawn from the probable experiences of the men for whom the book is written. Part III presents a brief course in business letters. Noteworthy special features are paragraphs of motivation addressed directly to the student and here and there well-selected extracts from good literature to attract his attention. Teachers in vocational schools and classes will find the book useful and stimulating.

ERNEST HANES

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